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Modern Business

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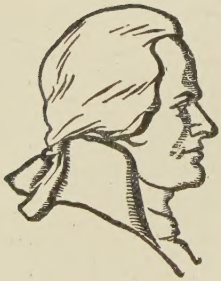

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RAILWAY TRAFFIC

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MODERN BUSINESS
VOLUME 14

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PREFACE

This book attempts to tell the man who buys railroad transportation the things that he should know about railroads, their rates, their services, and their place in the general scheme of business. The space limits imposed preclude a discussion of railroad organization. In this country the railroads have attained the highest development in the science of organizing and managing with efficiency great masses of men—many of them constantly in motion—over whom personal supervision by the heads of the companies is not possible.

This book is not intended as a handbook for traffic experts. Therefore it omits any description of the detail of packing, routing, shipping documents or shipping records. The financing of railroads, the investment status of railroad securities, the question of government ownership vs. private ownership, are all treated in other Texts of this Course.

In certain portions of this Text, particularly the two chapters on export and import rates, I have drawn freely upon my book, "The Port of Boston," published in 1916 by the Yale University Press. Acknowledgment thereof is herewith made. Among those who have been helpful in criticism and revision of the manuscript, I must mention in particular Mr.

000276

Walter Moore, Assistant General Freight Agent of New York Central Railroad.

The railroads' condition, services and rates described in this Text are those which were developed under the system of competitive private ownership of railroads in the United States. At the present time, the railroads are in the hands of the government, and are being operated as a unit. Within twenty-one months after peace, the roads will be returned to their former owners, to be operated as before, or they will be kept as a unified system either under government or private control. If the competitive system is to go, some of the rates, charges and services here described will be modified. And yet the modification cannot be too great, for the prosperity of great industries and entire localities of the country is dependent upon a continuance of the established order of things.

EDWIN J. CLAPP.

New York.

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RAILWAY TRAFFIC

CHAPTER I

THE RAILROADS AND THE SHIPPING PUBLIC

1. *Easy transportation a factor in prosperity.*—Transportation is the movement of persons and goods from one place to another. Each place thus supplements its own products with what is produced elsewhere. Each place pays for the products of others by shipping its own goods in exchange. This is trade. Transportation is the carrier of trade.

Material progress has meant the extension of trade. A town is prosperous when products are brought to its citizens from the whole country and the whole world—meat from Chicago, lumber from Arkansas, automobiles from Detroit, lemons from California, coffee from Brazil, cutlery from England. All these things come in direct or indirect exchange for what the town itself produces—perhaps news print paper. By specializing on the manufacture of news print paper the town is able to have lumber, meat and cutlery far cheaper than by producing them locally. By this process the town is also able to command far-away products such as coffee, sugar and lemons, which it could under no circumstances produce at home.

This is the meaning of prosperity—abundance of the material goods of life, widely distributed in the population. The increase of such prosperity marks progress.

Nothing has contributed to our prosperity and progress so much as has the marvelous development of transportation in this country. Cheap transportation vastly widens the area to which a favorably located town in the Middle West can ship furniture. That is, cheap transportation delivers that furniture to an ever increasing number of places so cheaply that the people in those places find it more advantageous to buy their furniture from this source than to make it themselves. Finally the Middle-Western town is engaged in doing almost nothing but making furniture.

By this process, called the geographical division of labor, we have enormously increased the annual product of the country. Much of Texas produces only cotton. North and South Dakota specialize in wheat. Pittsburgh makes steel and plate glass. New Englanders have found it advantageous to desert their barren farms, manufacture cloth and machine tools and buy the cheaper farm products which low railroad rates deliver from the virgin prairies of the West. In short, each section of our country is engaged in producing what it is best suited to produce, because distance, which formerly limited the markets reached by each locality, has been eliminated by low railroad rates. The result is an unrivaled production of goods

in the United States, so widely distributed for consumption as to make our people the most prosperous in the world. In bringing about this result the railroads have played a larger part than any other single agency.

2. *Importance of railroads in modern life.*—The railroads have been the major cause of that modern phenomenon, the city, an industrial and commercial center. Indeed, without the railroad the city could not subsist physically. Cut the railroad communications of Manhattan and in two weeks the city would starve, first the babies, for lack of milk, then the remaining population. Without the aid which suburban railroad services render, decent housing for the hundreds of thousands who carry on a great city's business would be impossible. Imagine Boston without its railroad suburbs! The railroads have created the physical basis for the city and the peculiar trend of our rate structure, which has tended to favor large competitive centers, acted to further the growth of large cities here as nowhere else.

But the interest of the average citizen in railroads is not occasioned solely by his pride in their part of American achievement. His interest is something nearer, more personal and more concrete than that. The farmer's earnings are the world's prices as fixed at the dominant foreign markets, minus the cost of getting his farm products there. Freight rates influence the volume of the farmer's earnings. As for the business man, freight rates determine his very life.

Upon the cheapness of a manufacturer's rates depend the sources on which he can draw for his raw materials and the extent of the markets which he can reach with his products. Upon the certainty that he can get the same rate as his rival, depends his ability to compete. He is fully as interested in obtaining non-discriminatory rates as low rates. His rival can overcome him by securing marked advantages in rates or in service—that is, in promptness and celerity in bringing or carrying his traffic. So also with the trader; the amount of business he can do and his ability to hold his own against competitors depend upon the reasonableness of his rates and upon the fair and equal treatment which he and his rivals receive with regard to rates and transportation service.

Every individual is interested in the passenger service of the railroads. Everyone travels on business or vacations or in daily commutation rides to and from work. Particularly for traveling salesmen and for the suburban dwellers near our large cities, passenger fares are an important item in business or living expenses. That private interests have not made the same effort to hold down passenger charges which they make to hold down freight charges, is due to two causes. In the first place, even those to whom passenger fares are a large item of expense—such as employers of traveling salesmen—find these fares insignificant in proportion to the importance of the freight rates, in and out, on the products which the salesmen sell. As for those to whom passenger fares are an

element of personal expenditure, these people award to this item the same neglect and disregard with which they treat other items in their personal budget.

Under the present system of fierce regional competition, communities as well as individuals find their business lives dependent upon rates to competitive markets which are low and which are fair compared with the rates of rivals. Freight and passenger charges in and out determine the cost of doing business in a town and so affect the town's opportunity of growth.

3. *Transportation rates and international competition.*—Even the competition of nations is frequently dependent upon the rail rates which those nations enjoy. It is apparent that, in normal times, America's ability to compete in foreign markets is much influenced by the ocean rates which America enjoys and which must be as low as those of rival nations selling in the same markets. But this alone does not suffice. Our manufactures must be brought to the ports, where the ocean rates begin, as cheaply as Germany or England puts its manufactures on board ship. This becomes a serious problem since some of our export-producing centers, like Pittsburgh and Detroit, are far inland; while even interior England lies practically on the seaboard, and Germany uses her waterways intensively and had, prior to the war, an effective system of low export rail rates designed to further her oversea trade.

The import rate structure likewise affects the pros-

perity of the country. A protective tariff imposed by the United States may be thwarted by a set of railroad rates which so favor imported goods, compared with domestic, as to nullify the protection which the tariff affords. Fifteen years ago certain import tariffs from the Atlantic seaboard to Chicago were found to be so low that, added to the ocean rates, they delivered plate glass from Hamburg to Chicago cheaper than it could be delivered from Pittsburgh.

4. *Why railroads are public utilities.*—Because transportation costs play so large a part in the fate of the nation, the community and the individual, and because they are an inevitable element in everybody's cost of doing business, the railroad business has been looked upon as different from other forms of private enterprise. It is called a public utility. Transportation is a daily necessity of life to the people—so is flour, yet the flour industry is not called a public utility and its prices are not put under strict government control. The reason is: Flour is not a necessary constituent of all other businesses in the country, nor is the flour industry a monopoly.

As long as free competition reigns in an industry we can be sure that the public will get its product at a figure slightly above the cost of production. As the cost of production is decreased, the selling price automatically falls. This holds true with flour in normal times, for milling is a highly competitive industry. With railroading the case is different because a railroad is a quasi-monopoly.

What do we mean when we say it is a monopoly? In most of our states it has been a long time since a new railroad could be constructed without the consent of some state authority in charge of regulating public utilities. When built, every railroad has had a monopoly of transportation for local points, points reached only by its line. Even as regards competitive points, served by more than one line, there has long been no competition in rates. These rates have been a matter of agreement between the roads concerned and were frequently published by a single tariff agent, applicable over any line. The only competition between the lines was in point of service. Indeed, competition in rates is just what the shippers do not want. They want rates on which they can count for long periods ahead.

5. *Necessity for government regulation of railway rates.*—The danger of monopoly, of course, lies in the fact that even if the cost of production—the cost of rendering railroad service—is reduced, the private railroad will not hand this on to its patrons in the form of lower rates, but will appropriate the entire saving for itself. That is, there is constant danger of a widening gulf between cost of service and public charges. When people say that we must have competition or regulation of private railroads, they mean that when conditions are such that there are no rival producers striving for business and forcing prices down near the cost level, then we must exercise the public power toward that end.

This is the principle which has underlain the regulative control of railroad rates exercised by legislatures or their creatures like the Interstate Commerce Commission and by the state railroad or public service commissions. The effort is made to enforce "reasonable" rates, that is, rates which, for one thing, approximate the cost of the service rendered. We shall see how enormously the task is complicated by the fact that under our system, individual rates are not and cannot be made mainly on the basis of the cost of the individual service rendered. It is practically impossible to determine this cost exactly since innumerable factors must be considered. The Federal and state commissions could not decide upon what basis to determine the reasonableness of a rate system. The present Federal valuation of railroads in the country is being made largely to enable the Interstate Commerce Commission to ascertain one firm basis in determining the cost of service, namely, the capital invested in a railroad, and so the fixed charges properly imposed by this investment, whether or not the "investment" is allowed to include an appreciation in the value of railroad real estate and franchises.

The public, like the individual, is not interested in reasonable rates alone. It is perhaps still more interested in assuring non-discriminatory rates, since private railroad monopoly, uncontrolled, inevitably favors the big shipper and hastens the advent of big business, and eventually of monopoly, in every industry in the country. Nothing contributed so much to

the growth of the steel, meat and oil combinations as the preferred rates which they received from the railroads before these came under effective public control.

6. *Temptation to discriminatory rates.*—The big producer has many advantages over the small producer. The big fellow saves in overhead expenses, advertising and selling costs, in the ability to use more plant machinery and to employ it more intensively. The big concern can save by buying its raw materials at lower cost because it buys in quantity. Because it bought in quantity, it used also to get its transportation cheaper. This simple, well-recognized principle in business is what was behind the ancient discrimination in rates in favor of the large shipper. Originally the large shipper was given lower rates than the small man. When this discrimination had been stopped, the two were given the same rate but the large shipper received a rebate. The rebate was an extra discount such as any wholesaler gives for quantity.

The natural tendency of private railroads to discriminate by giving a discount for quantity was strengthened by the peculiar nature of their business. A large part of a railroad's expenses consists of fixed charges—interest and overhead expenses—which run on, no matter whether the traffic is heavy or light. As a rule the revenue from local traffic, which cannot help moving on a given road, will go far toward paying the road's fixed expenses. Competitive traffic, therefore, represents pure gain. As this competitive

business grows, the profits of the company are largely increased with each small increase of traffic. In order to get the largest share of traffic from competitive points, and particularly from the large shippers there, the soliciting agents of private railroads are under the strongest temptation to offer these shippers, and these points, lower rates than are given to corresponding traffic elsewhere.

The inevitable result was to build up competitive railroad points in this country—points with more than one railroad—at the expense of local points, and to build up the business of the large shipper at the expense of the small shipper even at competitive points.

7. *Public regulation in the United States.*—When the railroads stopped the rate wars which nearly ruined them in the 70's and 80's, and when they were forbidden by law to rebate, the stronger and more law-abiding roads began to fight for competitive business solely by offering superior service. The weaker roads continued to give secret rebates, and, until the Government took them over, still sought to grant discriminations in the most ingenious and roundabout ways, such as allowing "false billing," long extension of credit to favored shippers, allowances for false damage claims, or exorbitant rate divisions allowed to small railroads owned by large shippers.

The railroad commissions, by continual vigilance and repeated prosecutions, have eliminated most of these abuses in the direction of personal discrimina-

tion. Today in the United States the only discount for quantity which remains, appears in the lower rate for shippers who can ship in full carloads as compared with those who ship in less-than-carload lots. In other countries the discount principle is carried further than here. In Germany, for example, there are special tariffs which apply only on full train loads of coal to Rotterdam from the West German industrial district, and on full train loads of iron ore in return.

A better enforcement of the long-and-short-haul clause of the Interstate Commerce Act — the principle that as a rule more shall not be charged for a short haul than for a longer haul over the same route — has tended to reduce the disadvantages under which the towns on a single railroad suffered, compared with the towns which enjoy the competition of several roads. But when the Interstate Commerce Commission was finally empowered to enforce the long-and-short-haul clause strictly, there were, at competitive points, great interests whose existence depended upon the continuance of the abnormally low rates. This put limitations upon the application of the principle in question. In the meantime there had been brought about that intensive concentration of industry in a comparatively few competitive centers which is characteristic of the United States today. A more drastic enforcement of the long-and-short-haul clause came with the advent of the United States Railroad Administration into control.

8. *Perils of over-strict regulation.* — While public

regulating bodies cannot go too far in removing discriminating railroad practices and rates, it is easy, and tempting, to go too far in the reduction of the absolute level of rates. This means reduction of the railroads' earnings; it means an injury to that financial showing which the railroads must make if they are to command the capital to extend their lines and their terminal facilities in connection with the growth of the public needs. The temptation to go too far in reducing rates is strong in weak commissions because such a policy is popular. The temptation is present even with strong commissions because it is usually impossible to demonstrate that an individual rate, which is ordered, is unremunerative.

When private capital, and not the bottomless public treasury, must be depended on for railroad maintenance and extension, we must allow that capital fair and liberal earnings. Until the war, with its avalanche of war order business, fell upon the manufacturing and railroad world, there had been for several years indications that the net earnings of our roads were too low. The number of receiverships was great, the new additions in line, equipment and particularly in terminals so small that the business of the country grew beyond carrying facilities, as was evidenced by railroad congestion and freight embargoes in 1907 and repeatedly since the war broke out in 1914.

It is not that the direction of rate regulation by commissions has been steadily downward. That burden on the railroads would likely have been more than

offset by the increased earnings due to the natural growth of business in the United States. But the excellently organized labor in railroad train service has progressively advanced its wages and so eaten still more heavily into earnings. The railroads have properly complained that of all industries they alone have had their costs increased (1) by strikes which they dare not fight but which they must settle by a grant of higher wages and (2) by mandatory legislation, such as full crew laws or acts regarding safety appliances or hours of service. At the same time the price of what they sell has been continually reduced by order of commissions. The railroads were caught between the upper and the nether millstone.

9. *Railroad income and new construction.* — The average income per mile of railroad operated dropped from $3337 in the five years ending June 30, 1910, to $3208 in the five-year period ending June 30, 1915. In the meantime, the average book cost of road and equipment per mile of road had grown from $63,600 to $72,700. So the average rate of income return on book cost changed from 5.41 per cent to 4.56 per cent, the return in the year 1915 being only 4.09 per cent. The effect upon new construction is here illustrated:

New Railroad Construction in the United States

(Miles of line)

1910	4100	1915	900
1911	3100	1916	1098
1912	3000	1917	979
1913	3100	1918	1537
1914	1500		

The slowing up of railroad developments in the country is also made clear by the table below, which gives the miles of line existing at the close of each decade:

Year	Miles of Line	Year	Miles of Line
1830	23	1890	161,200
1840	2,800	1900	199,000
1850	9,000	1910	250,000
1860	30,600	1915	257,000
1870	52,900	1918	260,000
1880	93,200		

To be sure, during all this recent period, we have spent large sums upon the intensive development of railroads already in existence: double tracking, rebuilding bridges and laying new rails to stand heavier trains, increasing the capacity of terminals, purchasing new equipment of cars and locomotives. A single illustration will show this intensive development. From 1900 to 1915 our railroad miles of *line* increased approximately by 60,000, while our railroad miles of *track*[1] increased 190,000; that is, from 200,000 to 390,000 miles. But these intensive expenditures represented an attempt to realize profits out of existing investments, not the construction of new lines such as the country demanded. There was more money to be made in manufacturing, trading, banking and other less regulated forms of business, and capital was seeking those forms of business just as certainly as water seeks its level. The prospective

[1] Counting second, third and fourth tracks as well as yard and siding trackage.

investor in railroads found that the industry in which he was asked to invest his money was not controlled only by business considerations, but partly by politics. Its fate was often decided in legislative halls. Its managers could not control the income of their property.

10. *Early war finances of carriers.*—In 1916 an avalanche of war business descended upon the carriers, and their average income per mile of line rose from $4250 in the year ending June 30, 1916, to $4850 in the same period of 1917. The return on the book cost per mile of road was 5.80 per cent for the fiscal year ending June 30, 1916, and 6.50 per cent for the fiscal year 1917. But these increases came too late to be of use to the carriers in providing them with a credit basis on which to borrow and adequately enlarge their properties before America's entrance into the war. When the carriers entered into the equipment market to buy, they found it was already preempted almost to capacity by foreign war purchases. Much of the equipment which they succeeded in ordering was never delivered to them. For example, they were particularly short of motive power. In 1917, 3400 locomotives and 33,000 cars ordered by the American railroads were ordered held up by the priority authority of our War Industries Board, while 2300 locomotives were constructed for railways in France to be used by our troops, 300 locomotives for the British, 1600 for the Russians.

The improvement in railroad operating revenues

which continued thru the first six months of 1917, disappeared in the last six months of the year. This was one of the worst periods in American railroad history. It was characterized by unexampled traffic congestion and the most terrible winter we have ever known. The revenues of all carriers were heavily hit. For example, even the strong Pennsylvania Company, for the *calendar* year 1917, saw its net income decrease almost $30,000,000, or 24.9 per cent compared with 1916. Its return on investment in road and equipment dropped from 6.10 per cent in 1916 to 4.70 per cent in 1917. Its operating ratio (percentage of operating expenses and taxes to operating revenue) rose to 82.63 per cent. It reduced to six per cent its time-honored dividend of eight per cent. When the Government took the carriers at the end of December, 1917, they were in desperate financial straits.

11. *Low rates, poor service.*—No matter whether railroads are in private or public hands, if they are to be self-supporting, the revenues must be sufficient to attract capital in competition with the attractions of other forms of business. The necessary causal connection between adequate railroad rates and adequate railroad service must be more clearly understood by the people of the country. Perhaps the experience of our transportation unpreparedness at our entrance into the European war will teach us the needed lesson.

Even before the war, the Interstate Commerce

Commission had begun to appreciate this point of view, as indicated by the moderate rate increases allowed in 1914, 1915, 1916 and 1917. In November, 1917, the Commission made the extraordinary move of inviting the eastern railroads to reopen their 15 per cent rate advance case, in recognition of the financial straits into which they were falling. The full 15 per cent demands were granted in March, 1918; that is, a 15 per cent advance on all commodities not covered by previous grants. One of the early acts of the Director General of Railroads was to further increase freight rates 25 per cent, passenger rates nearly 40 per cent. It is likely that in the future, increases in cost of operation will be more promptly reflected in higher rates.

A simple diagram printed on the back cover of the 1915 issue of Slason Thompson's *Railway Library*, and reproduced at the end of this chapter, illustrates better than a long explanation the elements of railroad income and outgo. A study of it will reveal most of the financial problems and possibilities of railroads in this country and will illuminate much to be said in later chapters on the subject of traffic and rates. These percentages vary but slightly from year to year.

12. *Government ownership.* Many countries have despaired of ever regulating their railroad monopolies, in order to prevent extortionate charges, discrimination between persons and the favoring of large cities which causes an unhealthy concentration of industry.

An alternative to government regulation of public service industries is government ownership. This solution of the problem has been followed in most of the countries of Europe, in Japan and in Australia. As a war measure, the United States Railroad Administration now operates our carriers.

It is vain to argue on theoretical grounds about the question of government ownership of railroads. The question is one of expediency. There is no valid argument in principle against government ownership. The question is: Under it, are the people better off? They are better off if they get lower rates, less discrimination in rates and better service. That government-owned railways give us less discrimination in rates may fairly be granted. The United States Railroad Administration raised our rail rates and fares, partly to meet the war needs. Whether, in the long run, the Government makes lower charges than privates carriers depends on whether or not government railroads are operated more efficiently; that is, whether transportation service can be produced by the Government at less cost.

Under private ownership and operation of American railroads, we enjoyed the lowest transportation rates in the world. It was not because of complaints against the rates or the railroad services that, at the end of 1917, Congress authorized the President to take over the railroads. He was compelled to take them over because the Sherman Law and the Interstate Commerce Act had forbidden them to combine,

pool or otherwise operate as a national system, and it was not possible for them to abolish rapidly enough all the old competitive ways which our laws had forced upon them. By an Act of Congress, the Government may now retain them until twenty-one months after peace is signed. Then the question of their retention by the United States or their return to private owners will be decided not on any grounds of theory or abstract principle, but upon the basis of comparative performance. Shall we find that the carriers, under the United States Railroad Administration, have served us better and more cheaply—not now, but in the normal period that follows the war? One thing is certain. Whether or not the Government keeps the carriers, it will never again force nor allow them to indulge in the waste of an outworn competition by whose abolition we have so greatly profited.

The events which led up to the commandeering of the carriers by the Government, and the changes in railroad rates and practices introduced by the Director General of Railroads, will be described in the two following chapters.

REVIEW

Outline the connection between the development of transportation, the geographical division of labor, and our prosperity.

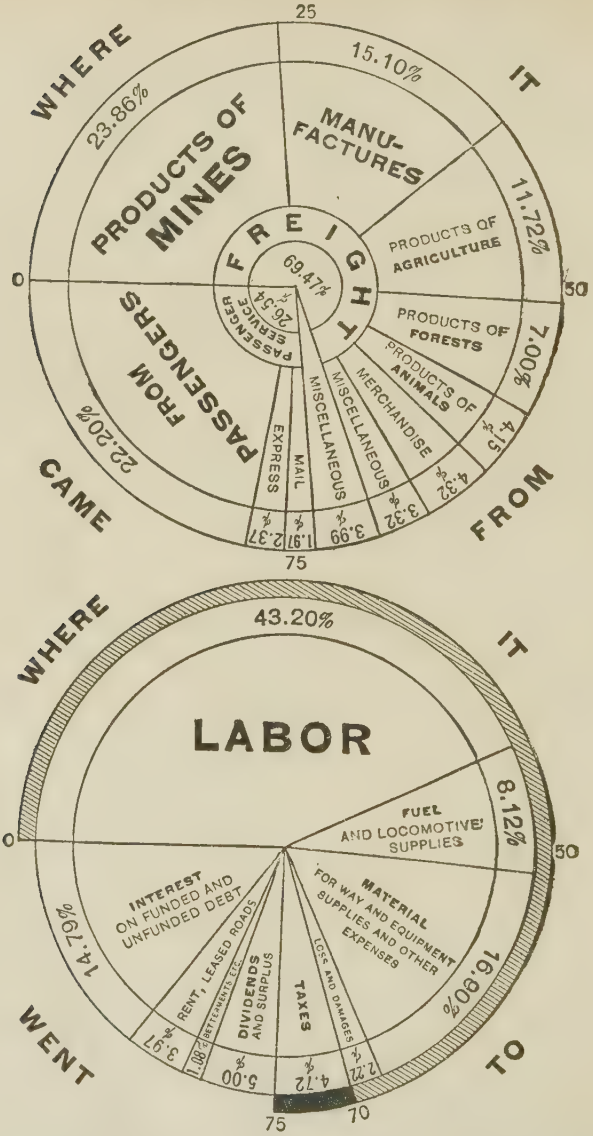
Why is a railroad considered a public utility?

Explain the natural tendency for railroads to make discriminatory rates.

What results are likely to follow a too strict regulation of railroads?

On what grounds must government ownership of railroads be decided?

THE RAILWAY DOLLAR[1]



THE SHADED CIRCLE SHOWS 75 PER CENT OPERATING EXPENSES AND TAXES. THE BLACK BELT BEYOND 70 PER CENT IS THE DANGER ZONE

[1] Slason Thompson's "Railway Statistics of the United States of America," 1915.

CHAPTER II

THE GOVERNMENT TAKES THE RAILROADS

1. *Car-shortage evils.*—A long train of events led up to the action of the President in commandeering the railroads, effected January 1, 1918. Those events began with the car shortages which developed in this country under the pressure of the tremendous war business we were doing for the Allies, in the year 1916. By car shortage we mean the excess of shippers' demands for cars over the supply that can be offered them—car shortage is unfilled transportation demand.

The car shortage was accentuated by the fact that we had no car pool in the United States. That is, each railroad owned its own equipment and was under no obligation to let any other road use that equipment unless it chose. Therefore there might be a shortage of cars upon one railroad system and a surplus of cars upon an adjacent system a few hundred miles away, with no possibility of reconciling the situation.

Worse than that, roads that did not supply themselves with cars, stole cars from roads which had taken this precaution. The original custom of transferring freight from car to car at the junction point of the railroads—resulting in keeping each road's cars on its

own line—was long ago abandoned in the interests of economy and good service. For a long time there has been an arrangement for allowing cars to go thru to destination, under a plan arranging for the railroads to compensate each other on a per diem basis for the use of each other's cars. The carriers increased the per diem rates for car rentals. Then they adopted additional rules designed to insure a prompt return of equipment to the owning carrier. In these rules fines were prescribed for misuse of another carrier's equipment, or for loading it, excepting in the direction of home. But experience showed that every carrier shrank from collecting the penalties provided in these rules. The offended carrier would fear retaliation from the penalized road, and this retaliation could very well take the form of diverting substantial quantities of freight, with a loss far greater than the penalties could possibly compensate.

Very extensive reconsignment privileges tended to have cars used for unnecessary transportation purposes, and low demurrage rates—only $1 per day per car—tended to encourage the use of cars as storage warehouses, in many lines of trade. During this same year, 1916, a peculiar commercial practice had a disastrous effect upon the transportation of the country. By mid-summer the vast purchases of war materials by the Allies were in full process of delivery. These purchases were made F. O. B. seaboard; that is, the inland manufacturer could not get his money until he delivered his goods at the seaboard. The re-

sult was that everyone loaded his shells, steel, copper, cartridges, powder, meat, wheat, into cars and sent them rolling off towards New York, Boston, Philadelphia or Baltimore, mostly to New York. Freight was unloaded upon the railroad's lighterage piers in New York until they were full. It was unloaded upon lighters, until no more could be hired to serve as storage. It was stored in cars held in the New Jersey yards of the carriers and, when those yards—which should have been kept free for switching—were full, freight was unloaded and left lying in the open between the tracks. When an allied ship came to assemble its cargo for loading, that cargo had to be picked out of an almost inextricable confusion at the port. In the meantime, in the fall of 1916, there was extreme difficulty in getting enough cars to handle the movement of western grain to market. The western roads could not get back the cars they had shipped to the east.

2. *Commission investigates car service.*—The Interstate Commerce Commission, after frequent complaints, on November 4, 1916, entered into an investigation covering the matter of car service thruout the United States. It found that "deplorable conditions" existed. At its suggestion, the American Railway Association appointed a "Conference Committee on Car Efficiency" to sit constantly at Washington and deal with the car situation. The Commission found that this committee had little power at first, tho later an increasingly large number of carriers

did agree to enter into a car service and penalty agreement, providing that "the subscribing companies hereby agree to the appointment of five members with plenary power to cooperate with the Interstate Commerce Commission." Upon the entrance of the United States into the European war, the reluctance of the carriers to cooperate apparently disappeared. On April 11, 1917, a historic meeting of the chief executive officers of the railways of the country was held in Washington. It was their resolve:

> That the railroads of the United States, acting thru their chief executive officers here and now assembled, and stirred by a high sense of their opportunity to be of service to their country in the present national crisis, do hereby pledge themselves, with the government of the United States, with the governments of the several states, and one with another, that during the present war they will coordinate their operations in a continental railway system, merging during such period all their merely individual and competitive activities in the effort to produce the maximum of national transportation efficiency.
>
> To this end they hereby agree to create an organization which shall have general authority to formulate in detail and from time to time a policy of operation of all or any of the railways, which policy, when and as announced by such temporary organization, shall be accepted and earnestly made effective by the several managements of the individual railroad companies here represented.

3. *Railway War Board operates railroads.*—An "executive committee" of these railroad leaders, known as the Railway War Board, remained in Washington and made attempts to operate the railroads as a national system, not without a large measure of suc-

cess. They effected a pool of box cars, which, like bank notes, circulated on all railroads. Upon occasions, they mobilized other portions of the rolling stock of the country, as when they collected all available live stock cars of the country and rushed them to save the cattle in drought-stricken Texas. A large number of locomotives was transferred from western and southern carriers to aid in untangling congestion in the East.

On suggestion of the Railway War Board, the railroads reduced the passenger service and effected a saving of 28,000,000 passenger train miles annually, relieving for freight traffic 570 locomotives and 2,800 men, and saving 1,800,000 tons of coal per year. Yet it is interesting to note that this reduction in passenger service was accompanied by an increase in passenger travel, due to the prosperity of the country. In October, 1917, the passenger traffic was 23 per cent in excess of October, 1916.

The Railway War Board conducted an intensive campaign for the heavier loading of freight cars. Indeed, there was great opportunity for improvement. Even at the end of 1917, the average load per car was only 17 tons, while the average capacity of all box cars in the country was 39.7 tons, showing that the cars were being used to only 42 per cent of their capacity. The Railway War Board made an advance. Their statistics showed that while the average train load in 1906 was 344 tons, in 1917 it had been increased to 675 tons. In the first six months after we entered the

war, our railroads handled more than the whole railroad traffic of 1906. In the eight months from April to November, 1917, the carriers hauled 1,101,000 more cars of anthracite and bituminous coal than in the same months of 1916.

4. *Railway War Board inadequate.*—That the War Board was not able to do all that the country required was partly due to conditions beyond their control. The unequaled traffic congestion of November, 1917, showed that something more must be done. The carriers had been handling about 25 per cent more commercial traffic than in 1916, the record year. In addition, they were required to move over 2,000,000 troops and a growing passenger business which apparently could not be checked. Our mobilization for war meant the rise of 72 new towns and cities, camps and cantonments of the Army, some of them having a population of 40,000 men. Thousands of cars of lumber and other material were needed to build these camps, and a daily movement of approximately 2,500 cars of food and supplies to feed and maintain them.

The impossibility of obtaining adequate additions to railroad equipment has already been described. Nine regiments of railroad workers were collected and sent to France, and the Draft further depleted railroad working forces. In addition, the high wages offered to mechanics in munition industries took away part of the repair shop forces of the carriers.

Worst of all was the abuse of priority orders on the part of Government agents. The Allies had already

created an "allied traffic executive," a committee which held allied purchases in the interior until they had ship tonnage waiting for them at an Atlantic port. The Railway War Board, in the Fall of 1917, instituted a railroad export committee, which prevented private export shipments being sent to North Atlantic ports except in cases where ship tonnage was waiting for the goods when they arrived. But this export committee had no control over government priority shipments. Thousands of petty officials, located in the interior and engaged in inspecting and accepting deliveries of enormous purchases of the Quartermaster's Department, the Navy Department, the Ordnance Department, the Medical Corps, as well as the officials of the Fuel Administration and Food Administration—these people were provided with red, green, blue, yellow and other colored priority tags, which they attached to cars and which insured them preferred passage to the seaboard.

5. *The War Board's limitations.* — Yet, part of the difficulty lay in the inability of the Railway War Board to develop among carriers the complete cooperation that had been proposed. On April 11, 1917, they announced the coordination of railroad operations "into a continental railway system." And yet as late as November 24, 1917, the Board made the following announcement at Washington:

> The Railway War Board today adopted revolutionary measures in order to relieve the congestion of traffic on the eastern railways. It directed that all available facilities on

all railroads east of Chicago be pooled to the extent necessary to furnish a maximum freight movement.

One part of the plan adopted for the operation of the eastern lines is to place at their disposal the facilities of railways in other territories to such extent as may be necessary.

That is, in November, 1917, the Railway War Board was still engaged in adopting measures that should have been the immediate outcome of its resolution of the previous April.

The Railway War Board, with the best of intentions, had not been able to effect the ultimate of transportation efficiency which the country required. For example, the national welfare demanded that competitive traffic should be moved over the shortest open route, to the limit of that route's capacity to carry the traffic. This meant diverting a great deal of business away from roundabout routes, routes whose solicitors had always been able to retain a certain percentage of competitive traffic. In other cases the business which had originated on a weak carrier's line should, in the national interest, be short-hauled to a strong carrier. But such operations of freight diversion or short-hauling threatened to ruin the finances of the weaker or roundabout routes. The War Board could not order such measures to be taken.

Another example. It was apparent that the interests of the nation might require a specialization of traffic among carriers. It was foreseen that it might become advantageous, for example, to confine the Pennsylvania largely to the hauling of freight be-

tween Chicago and New York, and divert to the New York Central the larger share of the competitive passenger business. Freight business is more profitable than passenger business. What accounting arrangements could be made for compensating the losses of the New York Central, thru such a rearrangement of traffic, out of the surplus of the Pennsylvania? The Railway War Board had no authority to order such necessary compensations to be made.

As a matter of fact, it was wholly impossible to provide for an individual accounting, between the railroads, to cover all the traffic changes that the country might require. It was only possible to take care of these difficulties if the accounting was settled *en masse*. That is, if the revenues of all roads flowed to one pool, the *total* deficit of one road could be compensated out of the total surplus turned in by other roads, deficit and surplus to be defined as the differences from the average net earnings when the roads were under individual management. This was the method which England had pursued when she took over her railroads, on the declaration of war in 1914, and guaranteed them their pre-war earnings.

6. *Interstate Commerce Commission recommends railroad unification.*—On December 5, 1917, the Interstate Commerce Commission transmitted to Congress a special report calling for further unification of railroad operations during the war. It said that the act to regulate commerce was framed in times of peace for times of peace, and therefore could not meet

the conditions of this unprecedented war. The Commission indicated that the unification could be effected in either of two ways, namely, by operation as a unit by the carriers themselves, relieved from the embarrassing restrictions of anti-trust laws and anti-pooling provisions, or by unified operation under the President, who should take over the railroads as a war measure and guarantee them an adequate compensation. Commissioner McChord, in his minority report, insisted upon the inadequacy of joint private railroad operation no matter how arranged, and demanded governmental control. This is the recommendation which prevailed.

On August 29, 1916, at the time when trouble with Mexico was threatening, the President had been authorized to take over the carriers of the country, in the following words:

> The President, in time of war, is empowered, thru the Secretary of War, to take possession and assume control of any system or systems of transportation, or any part thereof, and to utilize the same to the exclusion that may be necessary of all other traffic thereon, for the transfer or transportation of troops, war materials or equipment, or for such other purposes connected with the necessity that may be needful or desirable.

7. *Government control.*—Therefore, on December 26, 1917, the President issued a proclamation taking over the railroads on December 28, but from an accounting standpoint effective on January 1, 1918. Control and operation of the carriers was delegated to William G. McAdoo, Director General of Railroads.

The President gave assurance that the holders of railroad stocks and bonds should receive from the Government an unqualified guaranty of an adequate return for use of their property, and for the adequate maintenance of the railroads during the period of government control—that the railroads would be kept in as good repair and furnished with as complete equipment as when they were taken over. Government control was to be effected with as little disturbance of the old operative organizations and personnel of the railroads as possible, and, in safeguarding the public welfare, he said the Government would be regardful of the interests of the railroad owners and would be glad to avail itself of the experience and trained ability of their management. The Director General of Railroads was authorized to enter upon negotiations with the railroads involved, looking to agreements for just and reasonable compensation for the use of their property, "on the basis of an annual guaranteed compensation above accruing depreciation and the maintenance of their property, equivalent, as near as may be, to the average of the net operating income thereof for the three-year period ending June 30, 1917."

On January 5, 1918, the President asked Congress for legislation authorizing the making of contracts with the railroads in the sense described. He asked for $500,000,000 for a "revolving fund" to be used for expenses of Federal control and for constructive purposes in increasing the operating efficiency of the carriers.

8. *Railroads financed thru revolving fund.*—Congress passed, and on March 21, 1918, the President signed, the desired legislation. The President was empowered to release from Federal control, up to July 1, any roads temporarily taken over. The President was authorized to guarantee to any carrier which he took over, a sum not exceeding the equivalent of its average annual railway operating income for the three years ending June 30, 1917, its average operating income to be certified by the Interstate Commerce Commission. Such an agreement shall contain adequate and appropriate provision for the maintenance, repair, renewals and depreciation of the property. If the President and a carrier cannot agree upon compensation, the Interstate Commerce Commission shall appoint a board of three referees to report thereon. Either party not satisfied with the report of the Commission may turn to the Court of Claims for final settlement.

The $500,000,000 fund was voted by Congress and its possible use was extended by law to "the utilization and operation of canals, or for the purchase, construction or utilization and operation of boats, barges, tugs and other transportation facilities, on the inland, canal and coastwise waterways." Railroad securities may be issued by the carriers themselves, with the President's approval, or purchased by the revolving fund, then either held to maturity or resold to the public. The President is authorized to initiate rates and fares, which the Interstate Commerce Commission may not

suspend. The Commission, upon investigation, may annul these rates and fares after they have gone into effect, except that it may not reduce rates that have been instituted in order to keep the railroads self-supporting. Suits may be entered against the federal-controlled carriers for violation of the pooling laws of the Interstate Commerce Acts and of the Sherman Anti-Trust Law, but the court may, "upon the application of the United States, stay execution of final judgment or decree until such time as it shall deem proper."

9. *Federal control of railroads limited.*—Finally, a limit is set to the time of Federal control:

> The Federal control of railroads and transportation systems herein and heretofore provided for shall continue for and during the period of the war, and for a reasonable time thereafter, which shall not exceed one year and nine months next following the date of the proclamation by the President of the exchange of ratifications of the treaty of peace.

This, then, was the manner in which Government control of the main arteries of our transportation system came into effect at the beginning of 1918. The manner in which that control has been exercised is the subject of the following chapter.

REVIEW

Discuss the car shortage evil.

Describe the work of the Railway War Board. Why was the Board discontinued?

How did the Interstate Commerce Commission propose to secure unification of railways?

What is the purpose of the "Revolving Fund"?

CHAPTER III

GOVERNMENT REORGANIZATION OF RAILROADS

1. *Extent of government control.*—The United States Railroad Administration now has control of the greatest transportation system in the world, comprising 260,000 miles of track with 60,000 locomotives, 2,500,000 freight cars, 55,000 passenger cars, and freight and passenger terminals in every town and city of the country. Altogether the carriers have a book value something over eighteen billion dollars, according to the last report of the Interstate Commerce Commission. To maintain and operate this national system, costs about $2,650,000,000 a year. Of this sum, more than $1,200,000,000 is paid out for material and supplies, while $1,450,000,000 goes for wages to 1,800,000 railroad employes. They and their dependents represent more than eight per cent of the population of the country. The governmental organization of this transportation system has now reached a form that will in all likelihood endure as long as the period of Government control. This organization is graphically represented by the chart reproduced on the opposite page, "Organization of War Transportation Control," prepared for the Railroad Committee of the Chamber of Commerce of the United States of America.

2. *Organization of railroad administration.*—At the head of the system, exercising all the powers conferred by law upon the President, is the Director General of Railroads. His immediate personal staff includes his secretary, an assistant to the Director General, the assistant director general, and an advisor on finance, purchases and new equipment.

Reporting to the Director General are a number of committees, and the Director General's representatives on joint committees. The Inland Waterways Committee reports on inland waterways that can be profitably improved and operated by the Railroad Administration. In addition to the committees named on the chart, the Director General has reporting to him his representatives on the Joint Fuel Committee which devised and operates the zone system of distributing bituminous coal. The Port and Harbor Facilities Commission devises plans for coordinating rail and water transportation in the country.

The physical operation of the roads, and that alone, is segregated into a Regional Administration reporting to the Director General. There is a regional director for each of the following districts: Eastern, Allegheny, Pocahontas, Southern, Southwestern, Centralwestern and Northwestern. Each regional director has a personal staff of assistants, as well as a number of advisory committees. To the regional director reports each Federal manager in the region, these Federal managers having supplanted the railroad presidents, all of whom were removed. Re-

gional directors and Federal managers are intended to be purely operating officials, the other functions which seem to belong to railroad presidents having largely been focused into a central administration which, like the regional administration, reports to the Director General of Railroads.

3. *Duties of divisions.*—The central administration aims to perform, for all the carriers of the country, as far as possible, the business of financing, purchasing, engineering, handling labor, fixing rates, dealing with the public, as well as devising standards of operation and accounting. The central administration is separated into a number of divisions, each with a director at its head.

The Division of Capital Expenditures passes on the reports made by the individual carriers as to their budget of necessary expenditures for improvements. The Division of Finance and Purchases is responsible for the coordination and supervision of railroad purchases of materials and supplies, as well as for the development of plans for meeting the carriers' financial requirements. The function of the Division of Labor is obvious, as is that of the Division of Law.

The Division of Traffic has charge of freight rates and traffic, classification, passenger traffic and fares. The Division of Public Service and Accounts has charge of unifying accounting practices among the carriers and dealing with questions raised by the public as to the adequacy of the service rendered shippers and consignees. Therefore, the director of this divi-

sion represents in general the interests of the shipping public. In addition he supervises inventories of the railroad property controlled by the Government. The actuary, thru his control of a Bureau of Complaints and Suggestions, is also a new point of contact between the public and the railroads.

The Division of Traffic and the Division of Public Service and Accounting, acting jointly, have appointed three general committees and twenty-five district committees to consider rate and traffic matters of carriers under Federal control, report the facts to Washington, and recommend action as to all such matters as are subject to publication in lawful tariffs. Each committee includes either two railroad traffic officers and one representative of the shipping public, or three railroad traffic officers and two representatives of the shipping public. The three general committees have jurisdiction respectively over Official, Federal and Western Classification territories. To each general committee a large number of district committees report: for example, ten district committees report to the Eastern Freight Traffic Committee in New York City. Each committee has been busy in working out means of avoiding the more flagrant injustices wrought by the last 25 per cent rate increase; for example, thru disturbance of differential rate relations. In the future, the committees will serve as the shippers' main method of securing modifications of railroad rates, classifications and practices.

The most important of all the divisions is, of course,

the Division of Operation. It has the duty of setting up high standards of operation, devising standard types of rolling stock and motive power to be used on all carriers, supervising car service and safety work, inspecting and testing materials used, pooling the car repair work of the road. In addition, the operation of coastwise carriers has been put under a Federal manager of coastwise lines, reporting to the director of the Division of Operation. The Federal manager of Pullman lines likewise reports to the director of this division.

A new Division of Inland Waterways operates canal and river carriers on the New York and New Jersey canals, and the Mississippi and Black Warrior waterways. (Great Lakes steamship lines are operated under the eastern regional director.)

4. *Changes in individual railroad organization.*— The creation of the United States Railroad Administration, with vast new powers which it assumed, made necessary a far-reaching reorganization of the forces of the individual carrier. In addition, the elimination of competition made obsolete a part of the traffic organization of each carrier. The changes made were effected by general orders and circulars issued by the Director General.

The Director General announced that the carriers could no longer class as operating expenses the money they paid to officials whose services were not reasonably required in the operation of the railroad. These

included purely financial and corporate officials, high traffic officials, and counsel whose services were not needed for operating purposes. If the carriers chose to continue payments to these men, as well as to retired officials still on the pay-roll, the money would have to be appropriated by the corporation out of the guaranty fund paid it by the Government.

The solicitation of freight and passenger traffic was ordered discontinued. This led to the dismissal of many high traffic officials, tho a large part of the traffic force was diverted to the field of operation, handling claims, and acting as inspectors to expedite congested freight. Heavy inroads made by the Draft upon all departments of the railroad were filled by these traffic men, who were also in large demand as traffic managers of business concerns, confused by the new order of things. Railroad traffic departments continued to render information service, as quoting rates and tracing shipments.

5. *Some economies of railroad consolidation.*—Duplicate freight and passenger offices of carriers in large cities, were ordered consolidated. For example, on Manhattan Island there were forty-eight scattered passenger ticket offices maintained by the different lines. These were replaced by four consolidated bureaus in Manhattan and one in Brooklyn, which handled not only tickets for all railroad lines, but also season tickets and baggage transfer, Pullman accommodations and information as to routes, hotels and va-

cation resorts. There is a reduction of $189,000 per year in office rentals, and a decrease of 90 men in the selling force employed.

Railroads not terminating in New York were forbidden to maintain in New York general offices and charge their upkeep to operating expenses. Some of them, such as the Great Northern, choose to stay in New York and pay expenses out of corporate funds. Carriers were forbidden to maintain "off-line" freight or ticket offices. The temporary hardship interposed upon shippers, long dependent upon these offices for rates and information, will be described later.

Advertising was treated like the personal factors in the traffic department. In so far as advertising was for the purpose of drawing traffic from one railroad to another, it was dropped. In so far as it was informative in its nature, such as information circulars and terminal maps, it was allowed to continue.

Railroads were forbidden to pay contributions to a great list of organizations, except out of corporate funds. The forbidden list included the Bureau of Railway Economics and the National Association of Corporation Schools.

6. *Accounting changes.*—In the field of inter-line accounting it was possible to introduce savings. The checking of inter-line bills rendered was abolished. Simplified bases and rules were introduced for inter-road passenger and freight accounting. The payment of per diem (daily car rental) was abolished for roads under Federal control. A universal way bill

was devised and prescribed for all carriers. A standard form for bills of lading was to become effective September 8, 1919, but the railroads secured an injunction against it.

The Government having assumed to guarantee the net earnings of the carriers,[1] naturally strove to make them self-supporting. It raised their income by a phenomenal rate advance of 25 per cent in freight rates and 25-35 per cent advance in passenger fares. It attempted by strict supervision to keep their expenses down. A Federal treasurer was appointed for each carrier, and he was required to make frequent financial statements to the Director General, including a weekly cash report. Every capital expenditure over $25,000 had to be submitted to the Railroad Administration before it could be undertaken. Mr. McAdoo appealed to states and localities to refrain from their time-honored practice of increasing the taxes of railroads. Each carrier was required, prior to May 1, 1918, to take an inventory of its materials and supplies and adjust it, by additions and deductions, to December 31, 1917.

7. *Contracts between government and railroads.*— In the meantime, negotiations with the carriers proceeded with the purpose of securing agreement as to the contract to be concluded between the Government and the roads in accordance with the President's proclamation and the law of March 31, 1918. In September, 1918, the Director General announced the contract which he was willing to sign with the individual

[1] These average net earnings amount to about $975,000,000 annually.

roads. It provided for compensation to the carriers along the lines that the President had indicated. Most of the carriers accepted the contract as offered, both for patriotic reasons and because they felt that they would fare worse if they threw the matter into the courts or sought new legislation from Congress. Some of the carriers—and still more, certain representatives of large security holders, like the insurance companies—have strenuously objected to the terms of the contract.

A road which does not sign it may face the tedious course of resorting to the Court of Claims for compensation (and, in the meanwhile, starve financially). But a railroad which accepts the contract agrees not to resort to the courts. It agrees that there shall be no appeal from the decision of the Interstate Commerce Commission as to the annual compensation to be paid each carrier. It agrees not to seek redress in the courts if, in its judgment, its properties are not returned to it in as good shape as when they were taken over. The offered contract provides no compensation to carriers for loss of business, diversion of traffic, loss of corporate organization, and the abolition of exclusive traffic connections which were an important part of the company's assets. The Director General, under the contract, has a right to order money spent for "deferred maintenance" before dividends are paid. Since a great deal of money has been advanced to the carriers by the Director General in consideration of short-term obligations of the railroads, some people feel that a very dangerous situa-

tion will confront the carriers at the end of Federal control because of the accumulation of such indebtedness. These people object that the contract includes no promise that the Director General will facilitate the funding of such railroad obligations before the end of Federal control.

It is obvious that all these objections can be met by fair and generous action on the part of the Director General and the Interstate Commerce Commission. Railroad security holders will expect such action, and they have a right to expect it. If that fairness is evidenced, the railroad security holders will benefit financially from Government control. Mr. McAdoo, when he offered his contract in September, 1918, said:

> The operating results for the first four months of 1918 indicate that if the railroads had been under private control during that period they would have lost in operating income, as compared with the corresponding period of the preceding year, $136,116,533, and, as compared with an average of the corresponding period for the three-year test period, $86,064,356. This takes no account of the wage increase subsequently made, which nevertheless was retroactive to January 1.

8. *The short line question.*—One of the main difficulties of the Director General was presented by the short line railroads, which he began to release from Federal control in great numbers in June, 1918. That meant also, that they were released from Government guarantee of earnings. The short lines, particularly numerous in the South, were terrified because they were afraid they might be ruined by Federal discrim-

ination against them in the matter of rate divisions, traffic allotments and car supply on the part of the nationalized carriers on whom they were dependent. In July the President gave Congress assurance that he proposed to retain most of the short lines which were bona fide carriers, but did not want to be obligated to retain "tap lines" owned by mining, lumbering or coal companies and guarantee their pre-war earnings. Finally, a Short Line Section of the Division of Publice Service and Accounting was created in the Railroad Administration to assure fair treatment for both short lines retained and those relinquished.

9. *Economies in purchasing.*—In the office of the Director General, standardized freight cars of various types were worked out, as well as standard locomotives. These standards were submitted to experts and consulting boards, and an initial order of 100,000 cars and 1,025 locomotives was let. Regional purchasing committees were authorized to buy certain supplies for each carrier in the region, such as rails. As fast as supplies can be standardized among the carriers, the purchasing is being thus centralized.

On July 12, 1918, the Director General announced that he had approved capital expenditures amounting to $943,000,000 for 182 carriers. The sum was almost equally divided between expenditures for road improvements and for equipment. It is approximately three times as much as the railroads of the country have spent for these purposes annually heretofore. To be sure, it does not mean three times as

much work, because prices have gone up, and yet the Government prices paid for railroad improvements will be below the general price level. In addition to this allotment of expenditures, the War Industries Board granted to those who are producing for the Government railroads the necessary priority in the receipt of raw materials. The first large allotment to a railroad out of the revolving fund was $44,000,000 loaned to the New Haven Railroad.

Finally, the railroads have been instructed not to renew insurance policies of any class. The Railroad Administration assumes the risk, charging losses to operating expenses or to investment in road and equipment,or dividing losses between these two charges.

10. *Economies in operation.*—The largest opportunity for economies under Government management of course lay in the direction of economies of operation. First, a complete pooling of all kinds of freight cars was effected and they were moved about the country regardless of ownership. The same procedure was adopted with locomotives. For example, during the winter congestion of 1917-18, worse on the Eastern roads than on the others, these roads had assigned to them 120 locomoti[illegible] that had been constructed for the United States military railroads in France, 175 built for the Russian Government and 118 under order for the Southern and Western roads. The joint use of terminals was prescribed wherever that would result in operating economy or better service. Perhaps the best example of this was the running of

thru Baltimore and Ohio and Lehigh Valley trains to and from the Pennsylvania's passenger station on Manhattan Island. Railroads interchanged labor working at adjacent terminals, in order to clean up accumulations of shipments that clogged the freight houses.

Even more effective than this common use of facilities was the diversion of traffic to routes that best could handle it. At the very outset of the United States Railroad Administration, an inter-regional traffic committee was appointed to study and plan such diversions. Freight, formerly competitive, was concentrated upon uncongested roads or roads with milder grades and hence lower operating expenses. Direct routes for freight were, whenever possible, prescribed. As an extreme example of what was accomplished in this direction, the traffic of the Denver and Rio Grande was abandoned between Salt Lake City and Ogden and the parallel tracks of the Oregon Short Line used instead. A zoning system of bituminus coal distribution, worked out in collaboration with the United States Fuel Administration, largely prevented cross shipments of coal and attempted to confine each area of the country to the nearest coal-producing districts.

11. *Reducing passenger service.*—Reduction of service was another method by which operating economies were effected without interfering with the movement of essential traffic. Passenger train service was heavily cut by the Railroad Administration,

in addition to the decreases already made by the War Board, described in the last chapter. For example, the number of trains between Chicago and St. Louis was decreased from 15 to 9 and tickets by the various routes made interchangeable. Trans-continental trains were taken off and a great number of local services reduced so that, by the autumn of 1918, the Railroad Administration could claim that in the West it had eliminated 21,000,000 passenger train miles, and in the East, 26,420,000 passenger train miles per annum, unessential for the war needs of the country. Passenger traffic still remained heavy because of unavoidable conditions. Many men were travelling on important business for the Government. The conduct of manufacturing and commercial enterprises on their extended war scale necessitated much travel. For a year and a half after the war began there was an enormous waste of energy on the part of skilled labor, travelling to and fro. There was no standardization of wages or fixation of employment, and employers at times engaged in a blind competition for labor.

Economy in freight service consisted mainly in heavier train-loading and heavier car-loading, along the lines already indicated by the War Board. The heavier loading of miscellaneous package freight was facilitated by the device of "sailing days" for such cars, described later.

12. *Embargoes and priorities.*—When necessary, the Railroad Administration has taken radical meas-

ures to relieve congestion. It could declare embargoes, either upon all freight, or upon certain freight. For example, during the congestion of early 1918 there was for some time an embargo on the shipment of L.C.L. to New York. In January, 1918, there was an embargo on all shipments over the Pennsylvania Lines east of Pittsburgh, over the Baltimore and Ohio east of the Ohio River, and over the Philadelphia and Reading Railroad, excepting as to food, fuel and munitions.

The process of confining the carriers to the handling of commodities essential for the winning of the war was effected by means of priority orders. Priority regulations were framed jointly by the Railroad Administration and the War Industries Board, which likewise controlled each manufacturer's supply of raw materials. Among the most important of the priority changes was the removal of the numerous Governmental agents who had possessed priority during the régime of the Railway War Board. Someone has called them the Bolsheviki of railroad traffic. In any case, the export congestion at the ports was cleared up when these people were replaced by a single export control committee for the North Atlantic ports and a corresponding one for the Southern and Gulf ports. On January 1, 1918, there were on hand at North Atlantic ports 41,000 carloads of freight held in cars on piers and on the ground. By May, 1918, the amount had been reduced to approximately 28,000 cars. In March, 1918, export traffic delivered

to the steamships at North Atlantic ports averaged 949 cars per day, and in May of the same year it had risen to 1,172 cars.

13. *Increasing rates and fares.*—The most widely marked of the acts of the United States Railroad Administration was its general order No. 28, dated May 25, 1918, carrying an increase of approximately 25 per cent in the freight rates of the country, and an increase in passenger fares to 3 cents per mile. Elsewhere in this Text are treated the effects of the unprecedented freight rate increase upon the rate structures of the country, the opposition made to the rate increase, the modifications thereof, and the change in the long established position of the Interstate Commerce Commission brought about by the rate methods of the Director General. The Canadian railroads, whose rates are made in accordance with the United States rate structure, followed the McAdoo increase. Besides the change in rates, the Railroad Administration instituted a far-reaching change in railroad classifications, described in Chapter VI.

14. *The labor situation.*—Labor conditions upon the railroads were improved by a number of measures taken. The stealing of skilled railroad labor by other industries was interfered with by general order No. 1, which told the railroad employes not to leave their posts without giving due notice. A pointed letter from Mr. McAdoo to Mr. Hurley, Chairman of the Shipping Board, stopped the filching of railroad mechanics by ship-building companies, the chief

offenders. The Director General of Railroads intervened on behalf of skilled railroad men being drafted. On May 25, the date on which the freight rate increase was announced, Mr. McAdoo granted railroad employes (primarily train operatives) a wage increase amounting in all to $288,000,000. It was an average increase of about 20 per cent applied to all salaries below $250 per month. By the end of September, supplementary wage increases had raised the total to over $300,000,000. The Director General reached an agreement with the Railroad Brotherhoods that there should be a peaceable settlement of labor controversies during the period of the war. To settle such questions two Railroad Adjustment Boards were established, and the Director General forbade the settlement of disputes concerning wages or working conditions except thru these boards.

15. *Mr. McAdoo's creed.*—Finally, Mr. McAdoo has given expression to his creed as manager of the railroads of the country. His signed statement reads as follows:

> The policy of the United States Railroad Administration has been formed and shaped by a desire to accomplish the following purposes, which are named in what I consider to be the order of their importance:
>
> *First*, the winning of the war, which includes the prompt movement of the men and materials that the Government requires. To this everything else must be subordinated.
>
> *Second*, the service to the public, which is the purpose for which the railways were built and given the privileges accorded them. This implies the maintenance and improvement of the railway properties so that adequate transporta-

tion facilities will be furnished at the lowest cost, the object of the Government being to furnish service rather than to make money.

Third, the promotion of a spirit of sympathy and better understanding as between the Administration of railways and their 2,000,000 employes, as well as their 100,000,000 patrons, which latter class includes every individual in the nation, since transportation is becoming a prime and universal necessity to civilized existence.

Fourth, the application of sound economies, including:

(A) The elimination of superfluous expenditures.
(B) The payment of a fair and living wage for services rendered and a just and prompt compensation for injuries received.
(C) The purchase of material and equipment at the lowest prices consistent with a reasonable but not excessive profit to the producer.
(D) The adoption of standardized equipment and the introduction of approved devices that will save life and labor.
(E) The routing of freight and passenger traffic with due regard to the fact that a straight line is the shortest distance between two points.
(F) The intensive employment of all equipment and a careful record and scientific study of the results obtained, with a view to determining the comparative efficiency secured.

The development of this policy will, of course, require time. The task to which the railroad has addressed itself is an immense one. It is as yet too early to judge of the results obtained, but I believe that great progress has been made toward the goal of our ideals. All those who have had a share in this great work, including especially the members of my staff and officers and employes of the railways, have shown intelligence, public spirit, loyalty and enthusiasm, in dealing with problems that have already been solved and in attacking those which still await solution.

With their continued cooperation I feel assured of a future in which the lesson of our accumulated experience will be effectively employed to humanize the science of railroading and negative the idea that corporations have no souls.

W. G. McAdoo.

June, 1918.

REVIEW

Describe some of the economies secured thru railroad consolidation.

How were savings effected in inter-line accounting?

What difficulties did the short-line railroads present and how were these difficulties settled?

What economies has government management of railroads secured in purchasing? In operation?

How did the Railroad Administration relieve congestion?

What methods did the Director General take to remedy the railroad labor situation?

CHAPTER IV

RAILROAD RATES

1. *Basis of fixing railroad rates.*—Manufactured goods are, as a rule, sold at a premium over the cost of production large enough to reimburse the manufacturer for his investment. To be sure, there are periods of prosperity when most manufacturers sell at a large profit, and other periods of depression when most of them sell at a loss. But in the long run, with free competition, the price will approximate the cost of production, plus a small profit. If it gets above that level, producers will extend their output and rivals will enter the field. If it gets below that level, some producers will withdraw and others will reduce their output.

It is at once apparent that the railroads do not fix the price of their product—transportation—on this principle. In prosperous times there is a fixed capacity beyond which the railroads cannot extend their transportation facilities. When that point is reached goods are not accepted, as during the long freight embargoes of 1907, 1915-16-17. New competitors do not enter the field; the main railroad lines are fixed quantities, and nothing but branches are built nowadays. It is impossible for the railroads to reduce

many of their expenses to meet conditions in times of depression, and impossible for them to withdraw from business. A railroad may become bankrupt, but it is operated during its bankruptcy and afterward; bankruptcy merely transfers ownership from stockholders to bondholders. Railroad rates do not rise with an increase in demand for transportation or drop with its decrease. As a whole, they are fixed and unvaried from year to year. Individual rates are varied generally for commercial considerations that have little to do with the railroad's earnings. We have long since ceased to desire that rates should fluctuate from any cause whatsoever. We want fixed rates, reasonable but not fluctuating.

A sketch of the principles that determine railroad rate-making is mainly an enumeration of the reasons that influence railroads to charge what the traffic will bear rather than to charge the cost of handling such traffic.

If individual rates were based on cost of service, the railroads would not haul a carload of imported burlaps from New York to Chicago at the rate of 37.5 cents per 100 pounds, while they charge 112.5 per 100 pounds for a carload of boots and shoes. It costs no more to haul the boots and shoes than to haul the burlap. The charge is not on the basis of cost but on the basis of "what the traffic will bear." A closer study of the nature of the railroad business will make it apparent that the application of this American prin-

ciple of "charging what the traffic will bear" conduces to the fullest use of our railroads and is best for railroads and shippers alike. But it will be found that "cost of service", in so far as it can be estimated, is a necessary check upon abuse of the practice of "charging what the traffic will bear."

2. *Difficulty in determining cost of service.*—The cost of transporting any single commodity cannot be exactly determined. The reason is that most of the expenses of running a railroad go on independently of the question whether any particular carload of cotton or of wheat is shipped or not. The only cost which we can apportion to this carload is the extra expense of moving it. The great mass of general expense cannot be apportioned in any practicable way to the separate carloads moved. The prime reason for this lies in the fact that the proportion of general expense which falls upon the individual shipment depends upon the volume of traffic. If the traffic is heavy, each 100 pounds need bear only a small portion of the general expense. But the volume of traffic on a road depends upon the rates given, and it will be shown that if rates were ever made on the "cost of service" principle, the volume of traffic would drop heavily. Then the quota of general expense to fall on each shipment would be increased and any previous calculations as to the cost of service would be useless. It is not practicable to determine an average cost of transporting each hundred pounds, applicable to the

volume of traffic now moving, and expect it to hold when that volume is reduced.[1]

It is easy to show how the major part of the railroad's expenses are quite independent of the amount of business it does. The railroad's expenditures are grouped under the following main headings: fixed charges and taxes, maintenance of way, maintenance of equipment, conducting transportation, traffic expenses, general expenses (administrative).

Fixed charges and taxes go on whether the business is large or not. These charges consist of interest on capital borrowed and rentals for leased lines or properties. Taxes likewise are independent of volume of traffic. General expenses—the cost of the administrative departments, executive, financial, legal, purchasing—continue about the same when the actual business is reduced by half. It may be possible to discharge a few clerks, but that is all. Similarly the traffic, or selling, organization of the railroad must (in normal times) be maintained and kept working independently of the amount of business done.

As for maintaining the way and structures of the road, that must be done whether few or many trains run. Rails rust if they do not wear out, ties decay, washouts loosen the ballast, track-walkers must exercise their vigil and buildings be repainted or repaired

[1] It has been pointed out that one can no more determine accurately the cost of moving specific freight than the cost of raising a pound of tenderloin steak. It is not possible to go back and get the feed that the steer has eaten and divide it between the tenderloin and chuck, the hoof and the head.

even if half the trains are taken off. To be sure, these expenses increase as traffic becomes more intense, but about half of them go on whether business is heavy or light. Half these expenses are constant, half are variable with the traffic.

So with maintenance of equipment, there is little difference in the wear and tear, whether light or heavy loads are carried. Much of the equipment is scrapped before it is worn out, so the depreciation to be charged on it is independent of the volume of traffic. It is probably safe to say that, once the road is operating, half the expense for maintenance of equipment is constant and half is variable.

Apparently, the expense of conducting transportation could be directly apportioned to traffic and would decrease directly with the decrease of that traffic. Take the important item of fuel. From one-third to one-half the fuel consumption of a locomotive is independent of the number of cars it draws or the amount of freight those cars contain. Passenger and freight services are scheduled and the trains must run. The wages of engine employes and conductors are independent of the length of trains; variations can affect only the number of brakemen, tho, of course, an increase of all grades of employes is effected as more trains are put on. Men at stations, yards and crossings must be employed to handle traffic whether it is large or small. It is not unreasonable to assume than 50 per cent of the cost of conducting transporta-

tion is constant, and 50 per cent variable in proportion to the business done.

Professor Ripley in his "Railroads: Rates and Regulation" has presented a table illustrating these facts. He takes the percentage of total railway expenditure, represented by maintenance of way, conducting transportation, etc., in the year 1905. Such percentages change little from year to year. He comes to the conclusion that over half of the total operating expenses [1] are constant and over two-thirds of the total expenses are constant—that is, independent of the volume of traffic, once the road is in operation, and hence not apportionable to specific traffic. His table follows:

ILLUSTRATION OF PERCENTAGE OF LARGE CONSTANT EXPENDITURE IN RAILROAD OUTLAYS

	PER CENT OF OPERATING EXPENSES			PER CENT OF TOTAL EXPENSES		
	BOTH	CONSTANT	VARIABLE	BOTH	CONSTANT	VARIABLE
Maintenance of way	20	13.4	6.6	15	10	5
Maintenance of equipment	20	10	10	15	7.5	7.5
Conducting transportation	56	28	28	40	20	20
General expenses	4	4	--	3	3	--
	100	55.4	44.6			
Fixed charges				27	27	--
				100	67.5	32.5

Reproduced by permission from "Railroads: Rates and Regulation," by William Z. Ripley; Longmans, Green and Company.

3. *What really decides method of rate-fixing.*—All this means that two-thirds of the expenses of running a railroad are incurred for the property as a whole,

[1] In Prof. Ripley's table "Traffic Expenses" are included under "Conducting Transportation."

and not for specific acts of transportation. It is apparent that all the receipts of the railroad must equal all its expenses, if it is to remain a going concern. The question involved is one of method in collecting these receipts. Two methods are possible—to charge a fairly uniform rate per ton per mile for all goods; or else to charge some goods at a high rate, some at a low rate. The former method is an attempt to fix rates on the "cost of service" basis. The latter method, prevalent on American roads, is the method of "charging what the traffic will bear."

4. *Advantages of charging what the traffic will bear.*—Shippers of high-class goods like boots and shoes are charged first-class rates. They can afford to pay these rates and yet move the goods; even paying first-class rates, boots and shoes crossing the continent pay only a few cents per pair, an insignificant percentage of the selling price. But if California asphalt were charged this transcontinental first-class rate of $4.625 per 100 pounds, it would not be moved at all, for such a sum added to its cost of production would make it incapable of competing with Trinidad and Texas asphalt in the large markets east of the Mississippi. So asphalt is carried across the continent (via Galveston) at 62.5 cents per 100 pounds.[1] California lemons are carried east at $1.25 per 100 pounds; if the railroads charged more, they would not get the lemons to carry, for the fruit could not be

[1] To be sure, so far as the Atlantic coast market is concerned, California asphalt, because of water competition, would be carried at a very low rate even if there were no Trinidad competition.

sold in the East in competition with the Sicilian product.

It is no injustice to the boots and shoes that lemons are carried cheaper. The fact is of advantage to boots and shoes. The $1.25 rate on lemons more than covers the extra cost of transporting them and contributes something to the general expenses that fall upon the railroad whether it gets lemons to move or not. That is, the lemon rates carry part of the burden of general expenses which, were this traffic not moved, would all fall on boots and shoes and other high-class traffic. So if the $1.25 rate in lemons were raised and they stopped moving, boots and shoes and other high-class traffic would have to stand higher rates than they pay now, for the total receipts of the railroad must somehow equal its expenses.

Suppose that last year's receipts divided by last year's tonnage were to show that an average of $1.60 per 100 pounds was earned for carrying transcontinental traffic: that is, traffic from the Pacific coast to points east of the Missouri River. Then suppose the transcontinental roads charged all goods this flat rate. In such a case, no asphalt or lemons could be had to carry and California canned fruit and salmon might be made so dear in the Eastern markets that people would not buy them; nor could Pacific coast lumber compete in Iowa with lumber from the North and the South. There would be a large drop in the carrying of low-cost commodities, unable to stand the $1.60 rate. There would be at the most a very small in-

crease in the volume of drygoods, boots and shoes which would present themselves for transportation if their rates sank to $1.60. The drop in freight rates would never be felt in the selling price of shoes or drygoods, so no more of them would be bought or carried in stock than before. Such a drop in traffic would occur as to bankrupt the railroad unless it raised its uniform rate to a point far above $1.60.

"Charging what the traffic will bear" brings about the fullest utilization of our railroads and is the best system for the shippers as well as for the railroad itself. The principle is by no means peculiar to railroad charges. It is the principle that underlies modern taxation, which is so arranged that it falls heaviest upon the rich man, who can bear the higher rate. It is not that the state does more for the rich man than for the poor; if the latter has many children the state probably does more for him. But the state has to raise a sum of money to finance its various activities. The easiest way to raise the sum, without breaking any one down, is to raise a larger per capita from the rich men than from the poor men. As long as the poor can afford to pay an amount more than the cost of collecting from them, it pays to tax them. They are in this respect like lumber and asphalt in the railroad tariffs.

5. *Illustrations of principle of what the traffic will bear.*—A striking example is furnished by Acworth, the celebrated British authority on railroads, in the case of a hotel keeper in a summer resort. Suppose

that the annual rent of the buildings, plus taxes, maintenance, repairs, service and profit, works out to $360 per room per year, or about $1.00 per room per day. If the proprietor keeps the hotel open only three months of the year, he must charge the guests that use it $4.00 per day per room; if it is open only two months the rate must be $6.00. We may assume that the people who can afford to pay $4.00 per day will come only in June, July and August. But there are others who will come in May, September and October, enough to fill the hotel, if they can get a rate of $1.50 per day. If the manager offers this reduction he makes a profit of 50 cents per day on every room in his house during three months when it would otherwise be idle. He can apply these extra profits either to dividends or to reducing the cost of his rooms during the height of the season. A large part of his extra earnings will be applied in this latter way, for he is not the only summer resort hotel keeper in the business.

Every one has benefited by the innovation. The rich guests get their rooms cheaper than before, the poor have an outing that was formerly beyond their reach, and the proprietor makes more money than before. The traffic has been charged what it will bear, and that it *can* bear this is proved by the fact that it has developed. If the hotel keeper were forced to charge $1.50 per day for the six months the hotel is open, he would be ruined; in a six months' season he would have to get a uniform $2.00 per day and have

every room filled during this entire time, in order to break even. But if he charged $2.00 per day for the six months he could not fill the rooms in May, September and October. Experience has taught him that $1.50 is all he can charge in those months.

So with the railroad which has unused accommodation for freight. To fill this room it pays to take traffic at any rate above the cost of handling it.

Another Acworth example tells the recent history of the Uganda Railway, in British East Africa, which affords a striking instance not only of the meaning of the phrase "charge what the traffic can bear", but also of the extent to which a railroad can afford to reduce its rates when the sale of accommodation that would otherwise go unutilized is involved. The railway runs from Mombasa on the sea coast to Port Florence on the Victoria Nyanza Lake, a distance of nearly 600 miles. Natives from the highlands of the interior come down in large numbers to work on the coast plantations. Their fare on the way down, at the normal rate of one cent per mile (say $4.80 for an average distance of 480 miles), is paid for them by the planter who engages them. Their wages range from $1.50 to $2.00 per month. Evidently they cannot afford to pay three months' wages for railway fare when they want to return home.

Now on the Uganda Railway the bulk of the freight traffic is from the interior to the coast. In other words, there is a considerable empty freight car movement inward. Accordingly a special rate of 80 cents

has been recently established for the return journey in empty freight cars—six miles for a cent, the lowest passenger fare in the world. It pays the railroad, for the freight cars have to run in any case, and even this earning is better than no earning at all.

6. *Long and short routes.*—So far, the instances cited of "charging what the traffic will bear" have been based on the varying ability of different goods to stand the charges even when the cost of the service may be the same. But other considerations bring about charges which flagrantly violate the "cost of service" principle and cause less to be charged for a *more* costly service. There are short lines and long lines running from Boston to Chicago. The Boston and Maine, Delaware and Hudson and the Erie form a short route, the Boston and Albany and the New York Central form another. Many years of competition have forced the rates on these short routes to a low level; the heavy volume of traffic justifies the maintenance of those low rates. A roundabout route, the Boston and Maine—Central Vermont—Grand Trunk, operating thru Canada, desires to share in some of the high-class west-bound Boston business to put into its empty cars which come East with provisions and materials for New England. The roundabout route must meet the low rate of the direct route, must give an even lower rate than the direct, since it offers a slower service. It pays the Canadian route to carry a Boston-Chicago rate which is a differential under the "standard" direct rate: $1.06\frac{1}{2}$ first class as

compared with $1.12½ by the standard route. But the Canadian route could not live if it carried to all its intermediate points at this low rate. So it charges more to carry to its intermediate points, which are non-competitive. These points may complain, but the railroad will answer that it could get no Chicago traffic except at the low rate, which pays the out-of-pocket cost of handling it and contributes something to general expenses. Intermediate points would get no lower rate if the Grand Trunk, thru Canada, did not try to carry Chicago business. In its early days the Interstate Commerce Commission rejected a complaint of St. Albans, Vermont, that it was being charged higher rates from Boston than the Boston-Chicago rates, tho the Chicago traffic moved thru St. Albans into Canada and on to destination. The Commission's decision was reached by following the line of reasoning we have been studying.

Some of the most flagrant examples of moving traffic by long, roundabout routes prevailed in transcontinental traffic before the Government took the carriers. For example, traffic could move from New Orleans to San Francisco, at the same rate, over one route that was 2,471 miles long and over another that was 4,108 miles long. The short route was the Southern Pacific. The long route consisted of the Illinois Central Railroad from New Orleans to St. Louis; the Burlington from East St. Louis to St. Paul; the Soo Line from St. Paul to Winnipeg; the Canadian Pacific Railway to Van-

couver, thence by a coastwise steamship to destination. There was an unpardonable waste of equipment involved in operating that long route; it illustrates one of the worst wastes of the uncontrolled competitive system.

Similarly, some traffic used to be carried [1] from New York to Chicago by steamer to Savannah, thence by Central Railroad of Georgia and by Illinois Central to destination. This traffic moved thru Atlanta. Suppose it is first-class traffic. If it stopped in Atlanta it would pay a rate of $1.20 per 100 pounds; if it carried thru to Chicago, 90 cents per 100 pounds. That is, the normal influence of "cost of service" was reversed in the case of a roundabout route competing with a direct route. The roundabout route might charge more for a short haul than for a longer haul that embraced the short one. But, as we have seen, roundabout routes have been largely eliminated during government operation.

7. *The "long-and-short-haul" clause.*—In the old days, 40 years ago, even direct routes discriminated against their intermediate points in the same way. The roads running direct to Chicago would have low rates to Chicago and other points which they served in common, and recoup themselves by higher rates charged to their local patrons en route. This practice tended to build up a certain number of competing centers at the expense of the rest of the United

[1] Under government operation most of the "differential" routes have been abolished, but the differential rail route from New England to the West remains. (See Chapter VII.)

States and was an injustice to nearer points local to any one railroad. This practice is now hindered by the following provision in Section 4 of the Interstate Commerce Act (1910):

> That it shall be unlawful for any common carrier subject to the provisions of this Act to charge or receive any greater compensation in the aggregate for the transportation of passengers, or of like kind of property, for a shorter than for a longer distance over the same line or route in the same direction, the shorter being included within the longer distance, or to charge any greater compensation as a thru rate than the aggregate of the intermediate rates subject to the provisions of this Act; but this shall not be construed as authorizing any common carrier within the terms of this Act to charge or receive as great compensation for a shorter as for a longer distance.
>
> Provided, however, that upon application to the Interstate Commerce Commission such common carrier may, in special cases, after investigation, be authorized by the Commission to charge less for longer than for shorter distances for the transportation of passengers or property; and the Commission may from time to time prescribe the extent to which such designated common carrier may be relieved from the operation of this section.

The Commission did not grant power to a road to violate this "long-and-short-haul" clause of the law unless (1) the carrier was part of a roundabout route, as described, (2) was at some points subject to water competition which forced the rates down so low that the road would not be solvent if it tried to carry at these rates to intermediate points, or (3) there was "market competition" between terminal points. (For a discussion of "market competition" see end of Chap-

ter VI.) All these three reasons for disregarding the long-and-short-haul clause have been approved by the United States Supreme Court.

Today the Government has designated optional routes as preferred, second preferred and emergency routes, according as they approximate the short line mileage between termini, and the preferred routes are used up to the limit of their carrying capacity. Shippers have seen a decrease in their power to designate routes for their shipments.

8. *Effect of water competition on rates.*—For example, the Eastern Steamship Corporation had an overnight service from Boston to Portland. This line carried at low rates. If the Boston and Maine wanted any Portland business to carry, it was obliged to meet the water rates of those points. But these rates were too low to apply on its rail traffic as a whole, and were lower than a fair charge on traffic between Boston and points intermediate to Portland. So the railroad was allowed to charge a higher rate to many of these intermediate points than the thru rate to Portland. During the war, as we shall see, many of the all-water rates of the country were raised to the all-rail level.

The best example of the influence of water competition on thru and intermediate rates has been in transcontinental traffic. (This whole rate structure is today in process of readjustment, as will be explained later.) Rates from New York to San Francisco were lower than from New York to Reno. If a commodity

carried a rate of $1.00 per 100 pounds from New York to the coast, $1.25 per 100 pounds would be charged if it were sent only to Reno. The Reno people could not see why they should pay more for their supplies than was paid for them after they had been hauled thru Reno to San Francisco, 244 miles farther, over one of the most difficult mountain ranges on the continent.

The reason for this rate structure was found in the fact that the rail route from New York to San Francisco had always been subject to competition by water carriers, first around the Horn, later by the water route to Colon, across the Isthmus of Panama and by water to San Francisco, or by a similar water-rail-water route via the Isthmus of Tehuantepec. When the Panama Canal was opened ships could sail direct from coast to coast. The railroads charged the San Francisco traffic all that it would bear and yet stay on the rails and out of the boats. The rail earnings on this thru traffic were more than enough to pay the cost of handling it; these earnings contributed something to the expense incurred for all traffic jointly. But the low thru rates could not be applied to Reno and interior points without bankrupting the transcontinentals. If the railroads were ordered to equalize rates to Reno and to San Francisco, they said, they would have had to raise the San Francisco rates and so lose the coast-to-coast traffic. In that case Reno would have been forced to pay higher rail rates than it did. San Francisco would continue to get goods

at the same rates as formerly, but they would come by water instead of by rail. This situation is the one developed in the famous Intermountain Rate Cases of recent years. The intermountain cities in that decision obtained some relief, but they still continued to pay 25 per cent more than San Francisco for business from the Atlantic seaboard.

We have seen examples of how the application of the principle "what the traffic will bear" results in discriminations between commodities and between places. It also results in discriminations between classes of traffic. For example, a railroad will accept as its proportion of a thru rate a much lower compensation than it charges for local traffic. There is a commodity rate of 90½ cents per hundred pounds on canned goods in carloads from the Pacific Coast to eastern territory. Out of that rate the Northern Pacific, from Seattle to St. Paul, is paid 58 cents. The local rate from Seattle to Spokane is 54 cents. For 4 cents more, that is for 58 cents, the Northern Pacific will haul that same car 1,500 miles farther, from Spokane to St. Paul, *provided* the traffic is thru business for the East.

9. *Opinion of the Interstate Commerce Commission.*—The classic justification of the principle of "charging what the traffic will bear" is to be found in words which Judge Cooley, first Chairman of the Interstate Commerce Commission, wrote into the Commission's first Annual Report in 1887:

It was very early in the history of railroads perceived that, if these agencies of commerce were to accomplish the greatest practicable good, the charges for the transportation of different articles of freight could not be apportioned among such articles by reference to the cost of transporting them severally; for this, if the apportionment of cost were possible, would restrict within very narrow limits the commerce in articles whose bulk or weight was large as compared with their values. On the system of apportioning the charges strictly to the cost, some kinds of commerce, which have been very useful to the country, and have tended greatly to bring its different sections into more intimate business and social relations, could never have grown to any considerable magnitude, and in some cases could not have existed at all, for the simple reason that the value at the place of delivery would not equal the purchase price with the transportation added. The traffic would thus be precluded, because the charge for carriage would be greater than it could bear. On the other hand, the rates for the carriage of articles which within small bulk or weight concentrate great value, would on that system of making them, be absurdly low when compared to the value of the article, and perhaps not less so when the comparison was with the value of the service in transporting them. It was, therefore, seen not to be unjust to apportion the whole cost of service among all the articles transported upon a basis that should consider the relative value of the service more than the relative cost of carriage. Such method of apportionment would be best for the country, because it would enlarge commerce and extend communication; it would be best for the railroads, because it would build up a great business; and it would not be unjust to property owners, who would thus be made to pay in some proportion to benefit received. Such a system of rate-making would in principle approximate taxation; the value of the article carried being the most important element in determining what shall be paid upon it.

. . . . . .

To take each class of freight by itself, and measure the

reasonableness of charges by reference to the cost of transporting that particular class, tho it might seem abstractedly just, would neither be practicable for the carriers nor consistent with the public interest. The public interest is best served when the rates are so apportioned as to encourage the largest practicable exchange of products between different sections of our country and with foreign countries; and this can only be done by making value an important consideration, and by placing upon the higher classes of freight some share of the burden that, on a relatively equal apportionment, if service alone were considered, would fall upon those of less value. With this method of arranging tariffs little fault is found, and perhaps none at all by persons who consider the subject from the standpoint of public interest.

Rates, then, in this country have been made on the principle of "what the traffic will bear." But "cost of service" is used as a check upon abuse of rates made on "what the traffic will bear" theory, especially in order to prevent unjust discriminations between competing places and commodities. As we shall see in the next chapter, "cost of service" is an element, tho not the main element in tariffs and classifications. And in the railroad's own selfish interest "cost of service" fixes the minimum below which rates must not sink, just as "what the traffic will bear" fixes the maximum above which they must not rise.

REVIEW

Explain in detail the necessary differences in method of the manufacturer and of the railroad in charging for what they sell.

Explain the phrase "charging what the traffic will bear."

Show how in businesses other than railroading the principle of "charging what the traffic will bear" is applied.

State and answer the complaint of St. Albans, Vt., with regard to its rates from Boston.

What is the "long-and-short-haul clause"? Under what specific conditions can it be violated in rate-making?

How has the government designated optional routes and how are they used?

CHAPTER V

RAILROAD RATES (*Continued*)

1. ***Relation of rates to capitalization.***—There is a generally prevalent impression that railroad rates depend upon capitalization. This is true, but not in the degree frequently assumed. Money cannot be made for a railroad by the mere printing of stock certificates. If a railroad is getting a maximum return on its present investment by charging what the traffic will bear, that return is not increased merely by doubling the number of certificates which share in the return. The Interstate Commerce Commission must pass upon every rate increase, and will never allow an increase merely in order that the road may pay dividends upon securities issued without an adequate consideration.

Over-capitalization may, however, prevent future rate reductions. The public has the right to expect that, as the traffic of the country grows and the earnings of railroads increase, part of that increase will be shared with the public in the form of lower rates, either voluntarily or upon compulsion from rate-regulating bodies. But, if a railroad starts with an inflated capitalization, it is a long time before increased earnings can do more than provide for interest and dividends on the capitalization. That is, it is

long before there is any surplus to share with the public. If the Commission tries to dictate a scale of rates which the railroad considers too low, the railroad fights the rates as confiscatory and the courts in their decisions are influenced by the statement of the return which the proposed rates will allow upon the railroad's capitalization. On such grounds, various state attempts to prescribe railroad charges have been frustrated.

The Annual Report of the Interstate Commerce Commission for 1909 described the connection between capitalization and rates as follows:

> The direct interest of the Commission in the matter arises from the fact that Congress has made this body a tribunal, when complaint is made, for inquiring into the reasonableness of railway rates. It has frequently been urged that capitalization exercises no influence upon rates, but such an assertion is at best a partial truth. When one holds in mind how persistently the courts oppose the enforced approach of railway tariffs to the line of confiscation; when one comes to realize how eager the carriers are to restore to their property accounts the value of the improvements of past years paid out of revenues; when one clearly understands that so long as railways which operate on different levels of cost continue to compete for the same traffic, there must result a permanent differential profit to the more fortunate road; and finally, when one reflects upon the fact that securities once issued are ordinarily beyond recall and beyond control, it is difficult to see how one can assert that the kind and amount of securities issued by a public service industry have no bearing on the problem of railway tariffs as that problem must be regarded by the Commission and by the courts. It is in fact the setting in which the problem is most frequently submitted for judicial consideration.

On this ground the Commission has asked for control over issues of railroad securities. That control has been refused. In view, however, of the publicity that now surrounds railroad financial operations, and in view of the control which state laws or state railroad commissions exercise over the securities of corporations under their jurisdiction, little is to be feared from repetition of the scandalous over-issue of railroad stock which marked the early history of our roads.

2. *Capital expenditures approved by Director General.*—During Federal control, all capital expenditures of the carriers must be approved by the Director General. In so far as these expenditures are financed by the Government's "revolving fund", the carriers must eventually reimburse that fund. It is not unlikely that the power of the Director General will be transferred to the Interstate Commerce Commission when the carriers return to private control.

3. *Railroad valuation undertaken by Commission.*—The Interstate Commerce Commission has undertaken the huge task of making a valuation of the railroads, with a view of finding a means of checking the cost of railroad service, at least so far as that cost concerns the item "return on investment." The valuation is to report original cost, original cost less depreciation, and reproduction cost. In a specific rate case the Interstate Commerce Commission may take any one of these valuations to represent "actual value." Field parties of the Commission's Valuation

Division have been measuring the railroad property to ascertain values. Their accountants have searched the carriers' books for prices paid. The roads are required to keep current accounts of all additions to their property, so that when the work is complete the information will be entirely up-to-date. The field work should be completed about January 1, 1920, and the entire work two years later. The cost to December 1, 1918, was $13,206,831.

However, it may be doubted whether such a "value" will be useful, either in fixing the general level of rates or in finally compensating the carriers, should the government buy them out. After all, the railroads are operating concerns, not mere physical properties. Their "value", both for rate-making purposes and for expropriation, should be their operating results, their earning power. That is the "value" which the Government has adopted in renting the carriers; it pays them approximately $975,000,000 per year, the average of the pre-war earnings. If the roads are to return to private hands they must be able to finance the new developments that the traffic of the country will require. To do such new financing they must have credit, and credit is dependent on assured earning power. If the Government considers pre-war earnings as a fair rental, it might well consider the capitalization of those pre-war earnings as a fair price, should it decide to buy.

Should this $975,000,000 net per year become the basis of the general rate level, future rate increases

would have to be allowed to meet such rising operating costs as impaired the $975,000,000 net, and rate increases would also have to provide for the cost of non-productive improvements. So much for the general rate level. The Commission would continue to pass on individual rates as "reasonable" according to whether they are higher or lower than corresponding rates elsewhere.

4. *Relation of rates to cost of service.*—Further consideration should now be given to the effect of cost of service upon rates. Other things being equal, classification is influenced by cost of service; that is, goods that are costly to handle or haul are charged more than goods that are cheap to handle and haul. Cost of service influences railroad rates in that for a given article more is generally charged for a longer than for a shorter haul. The Interstate Commerce Commission is, as has been seen, empowered to forbid the charging of less for the longer haul in most cases, because any other policy would deprive a nearer point of its geographical advantage over a further point in competition for a common market.

It is true that the Commission allows this rule to be broken in certain cases when the exigencies of competition prevail. But the limit to which the railroad may go in reducing its rates is the actual cost of handling the business. Traffic must not be carried for less than the extra cost it occasions the railroad. If it were carried for less, part of this handling cost would be thrown as a burden, (1) either upon the share-

holders of the road, who would feel it in decreased dividends, or (2) upon other traffic on the road, which would feel it in higher rates.

In one of its early cases (Volume IV, p. 26) the Commission laid down the principle that the extra handling costs of given traffic fixed the lowest limit to which railroad rates could be reduced in order to meet water competition. The Commission said:

> Rail rates that sacrifice all benefits to the carrier from the business, in order to divert it from competitors by water, are destructive and illegitimate competition. . . . When, therefore, a rail carrier reduces its rates, to compete with a water carrier, below the average necessity for its own proper uses, it takes upon itself the onus of showing that the reduction does not result in actual loss, so as to impose a burden on other traffic and does not unjustly discriminate against localities that are charged higher rates on like traffic.

This did not suffice to protect water carriers—for example, on the Mississippi River system—from ruinous competition on the part of the railroads. The railroads were allowed to carry this particular competitive traffic at rates *as low* as the actual handling cost, until the water line was driven out of business. This competitive traffic was a small part of the railroad's total business and the road could be kept healthily alive from the receipts on other traffic. However, it was the only traffic the boat line had—it could run nowhere but on the river. When the boat line was dead, the railroad line would raise its rates to a profitable level. This practice was ended by

an amendment to the Interstate Commerce Act in 1910 (Section 4). The amendment reads:

> Whenever a carrier by railroad shall in competition with a water route or routes reduce the rates on the carriage of any species of freight to or from competitive points, it shall not be permitted to increase such rates unless, after hearings by the Interstate Commerce Commission, it shall be found that such proposed increase rests upon changed conditions other than the elimination of water competition.

That is, a railroad was not prevented from driving a privately owned water line out of business. But if it did choose to kill the business of the water line, it must permanently assume the burden of carrying traffic for the public as cheaply as the water line would have carried it. This part of Section 4 of the Act differed from the provision of the Clayton Anti-Trust Law which brands as unfair and unlawful competition the practice of the trusts in underselling small local competitors, while keeping up rates over the country as a whole. In contrast with other monopolies, the railroads might still eliminate the small water competitor provided they were willing to take his place when he was gone. Today the Government operates the main inland waterways of the country as well as the rail carriers, and competition between the two has ceased for the time being.

There is a strong agitation for further legislation to protect water carriers against unfair competition by rail carriers. Before the 1910 Amendment to Section Four of the Interstate Commerce Act, (see page

67) the railroads could exercise their own discretion in disregarding the long-and-short-haul provision of that Section. A decision of the Supreme Court (the Alabama Midland Case, 175 U. S.) authorized the rail carriers to meet water competition by lower thru rates than intermediate rates. Then the 1910 Amendment to Section Four made it necessary for a carrier to get permission from the Interstate Commerce Commission for each specific violation of the long-and-short-haul provision. Yet the Commission was bound, by the Alabama Midland decision, to take into consideration either actual or potential water competition in considering requests of the rail carriers for Fourth Section relief.

"Potential Competition" is an elastic conception. To be sure, the Commission requires that this potentiality must be apprehensive, yet the existence of such a railroad structure prevents water lines ever getting started. For example, in the Southeastern rate cases (30 I.C.C. 263) it was shown that the first-class rate from New York to Memphis, a distance of 1,160 miles, was $1 per hundred, or $20 per ton. To Grand Junction, Tennessee, an intermediate point, the distance from New York was 1,107 miles, but the rate was $1.41 per hundred or $28.20 per ton. Grand Junction was 53 miles nearer New York, but had a rate of 41 cents per hundred pounds, higher. Justifying this discrimination, the Interstate Commerce Commission said that the railroads were justified in maintaining a lower rate to Memphis in order to

prevent the installation of a boat service from New Orleans to Memphis which, in connection with the boat service from New York to New Orleans, would give a regular water service from New York to Memphis. The Commission said:

> There is a disconnected (water) service between New York and Memphis. The water competition is to be regarded as potential, but not actual, and the testimony in this case indicates that any material advance in the rates from New York to Memphis will, without doubt, result in establishment of active competition on the Mississippi River.

Water transportation interests in the country have united with the Intermountain interests (see Chapter VIII) in demanding that Section Four of the Interstate Commerce Act be so amended as to prevent rail carriers from meeting water competition between terminal points, unless they are willing at the same time to give intermediate points the advantage of the rate reduction thus brought about. It seems to them an anomaly that the United States should expend in the neighborhood of a billion dollars in improving its waterways and then permit a railroad rate structure which prevents the waterways from being used.

5. *Passenger rates proportioned to distance.*— While rates increase with the distance carried, the increase is exactly proportioned to the increase in distance only in the case of passenger fares. Passenger fares are generally made on the basis of a definite amount per mile. In this country the charge used to be, as a rule, 2.5 to 3 cents per mile for local

traffic, about 2 cents for thru competitive traffic. Purchasers of round trip tickets paid often less than double the one-way fare. Lower rates were given where full trains and heavy traffic could be assured as in the case of commutation, excursion or immigrant travel. Low rates of 2 to 2.25 cents per mile were given to purchasers of 500 or 1000 mile mileage books. Low rates on the principle of "what the traffic will bear" were charged to encourage travel in dull passenger seasons. High rates, on the same principle, were charged to those who traveled on a few fast "extra fare" trains. But most of the travel in this country was on one-class trains where all passengers paid the same fare, which was determined on a mileage basis. We had nothing like the situation on German railroads where one train carries first, second, third and fourth class coaches and where all passengers pay, as they can "bear" it, fares that range from 3 cents per mile for Class I down to ⅝ cent for Class IV. The new passenger fare structure of the country, introduced by the Director General's general order 28, is described at the end of this chapter.

Increases in freight rates are with good reason not made in direct proportion to distance. Passengers load and unload themselves. Freight must be handled at either end of its journey by the railroad. Passengers require no such clerical services as are necessary for the making and delivery of freight papers. Moreover, there is no switching involved in handling a passenger train at a terminal. It runs direct to the sta-

tion. The freight train is halted at the yards and divided. Switching locomotives deliver the cars, some to industrial sidings, some to "team tracks", some to the railroad's freight houses. These clerical and physical costs of terminal handling are a considerable part of the cost of performing the freight service. For a journey of 100 miles, the freight must be handled twice and if it moves only 10 miles it must also be handled twice. Obviously, the double handling expense distributed over a 10-mile haul makes the total transportation cost per mile heavier than if that same handling expense were distributed over 100 miles.

For example, the terminal cost (switching and handling) of a ton of freight handled at the freight houses of a large city is at least 60 cents. We may assume 45 cents per ton terminal expense as a fair average for the country. Now, let us take 45 cents per ton as the terminal expense for a given road and 9 mills (0.9 cent) per ton per mile as the uniform cost of haulage. It will be instructive to compare the entire cost of transporting a ton of freight 10 miles and 1,000 miles.

		Cost of Transporting 10 miles. Cents	Cost of Transporting 1,000 miles. Cents
I.	Terminal expenses (2 x 45 cents)	90	90
II.	Haulage expense (0.9 cent per mile)	09	900
III.	Total	99	990
IV.	Total cost per ton mile	9.9	0.99

Thus, the 1,000-mile freight service costs $9.90 per ton, or 49.5 cents per 100 pounds. This $9.90 is only 10 times as much as the 99-cent cost of the 10-mile haul, tho the distance is 100 times greater. The rate has not increased in direct proportion to the distance. In such a case the rate for 1,000 miles would be $99. The factor of rate increase (10) is the square root of the quotient which results from dividing the longer distance (1,000) by the shorter (10). This formula perhaps may be taken as a rough rule in calculating the cost of transporting the same product different distances.

6. *Method of calculating rates in the United States.* —Classification of goods will be discussed in the next chapter. The rate on a given shipment is easily found if you know the class rating of the goods, and the stations between which they are to be shipped. The class rating for the shipment is found by reference to the classification book. The weight of the shipment determines whether the goods move in carload rating or in less-than-carload rating. For example, in the East, ice cream refrigerators, in boxes or crates, are second class if shipped in less-than-carloads, fourth class if in carloads of at least 18,000 pounds. Once the class rating of an article is ascertained, the tariff sheet must be consulted to give the class rates between the two stations in question. If both of the stations are competitive points, the tariff sheet may be published by the joint agent of all the competing lines. If either of the points is local

to one road, the tariff will be published by that road.

There is no separate tariff giving class rates between each and every other station in the country. In some cases, a tariff sheet gives a single set of class rates that apply from a given group of stations to another group of stations regardless of distance. Sometimes a local tariff is a mileage tariff giving the rate applying to each class for each distance; the distance in miles between each two stations covered by the tariff is shown in a separate mileage table. The tariffs of each line are all issued and kept on file by the road's tariff bureau at its home office. Each station agent has sent to him the class tariffs applying between his station and all destinations to which his clients would be likely to ship, as well as all commodity rates in which his town is interested. The law requires these rates to be kept on file, open to public inspection. The sheets are kept by the agent in loose-leaf files which can be kept up to date and are convenient in quoting rates to shippers.

We shall later see that the general system of rate making differs in different parts of the country. Rates from New York to points north of the Ohio River and east of the Mississippi are a percentage above or below the fundamental New York-Chicago rate. Rates from New York to points in the Southeast were originally made on what is called the "basing point system." For example, the rate to Augusta, Georgia, was comparatively low. Points near Augusta, even this side of it, were charged the Augusta rate

plus a local or a specific rate from there. Rates across the continent are identical for all Pacific coast terminals. All this refers to class rates alone. To this structure, already complicated, are added commodity rates which in themselves are confusing.

It is obviously impossible to have all these rates contained in any one book. The tariffs of every large system in the country comprise a library. In 1913, the Pennsylvania Railroad joined other trunk lines in an application to the Interstate Commerce Commission for a five per cent rate increase. In connection with that increase, the Pennsylvania lines east of Pittsburgh filed proposed new tariffs covering 113,965,747 pages and weighing 302,583 pounds, compiled at a cost of $180,134. The Pennsylvania lines west of Pittsburgh spent $250,000 on getting out new tariffs upon the same occasion; their volume has not been ascertained. In the 1918 Report of the Interstate Commerce Commission, it was stated that 141,254[1] tariff publications containing changes in rates had been filed during the year. The corresponding number in recent years has been as follows:

SCHEDULE FILED WITH INTERSTATE COMMERCE COMMISSION

1908.....228,403	1912.....108,766	1916.....106,442
1909.....184,303	1913.....141,257	1917.....166,810
1910.....154,588	1914.....149,031	1918.....141,254
1911.....121,829	1915.....149,449	

It is not possible now to foretell the changes in rates that will be effected by the Government control

[1] This figure includes changes in freight, express and pipe-line rates, passenger fares, and classification ratings.

of railroads, assumed during war time. If this control persists, the most likely thing is that rates will be gradually revised so as to be based more largely upon "cost of service." That means that there will probably be fewer classes of goods than at present, fewer exceptional commodity rates, and that the distance principle will be more exactly maintained than at present, in making tariffs. The established policy of the private railroads in keeping every one in business all over the country, will likely be supplanted by a policy that will retain for industries, in a larger degree, the advantages of their geographical nearness to adjacent markets. All this can be nothing more than prophecy, but this has been the trend of rate development in countries where the roads have passed from private to public control, and it seems to be the direction that our rate discussions are taking.

7. *Freight rates given increase.*—The Director General's horizontal freight rate increase of 25 per cent, made May 25, 1918, effective June 24, 1918, brought to the public attention some interesting facts regarding rate making. The Director General in issuing his general order 28, making those rate increases effective, explained that railroad expenses in 1918 would be almost $850,000,000 more than in 1917, due to higher wages, fuel and material costs. The freight rate increases he proposed were to bring $700,000,000 into the Government treasury, the new passenger fares about $200,000,000. As a matter of fact, the rate increases are bringing larger

revenue increases than expected. In the single month of August, 1918, gross revenues from freight increased $100,000,000, and passenger revenues over $30,000,000 compared with August, 1917.

General order 28 in its original form increased both interstate and intrastate class rates 25 per cent, and prescribed that state classifications should be supplemented by Official, Southern or Western Classification, according to the location of the states. Intrastate rates were cancelled in cases where interstate rates (always higher) applied between the same points. For all shipments minimum charges per 100 pounds were prescribed; for example, in Official Classification Territory, these charges ranged from 25 cents first class to 7 cents sixth class. A minimum charge of 50 cents on an L.C.L. shipment was prescribed. On carloads a minimum of $15 per car was to be levied, tho neither this minimum nor the 25 per cent increase was to apply to switching services.

Commodity rates thruout the country were likewise increased 25 per cent except for a list of enumerated commodities for which specific increases per 100 pounds were ordered. It was provided that the rate increases should be superimposed upon all those already granted by the Commission, whether actually in effect or not.

8. *Protest made against increased rates.*—No sooner was general order 28 promulgated, than a large number of protests were filed. In the first place, it was explained that such a percentage increase

penalized long-distance shippers. Obviously, a 25 per cent increase in a rate of $1.00 is a heavier burden on the shipper than the same increase applied to a rate of 20c. Based on this principle, in August, 1918, the State Railway Commissioners of Washington, Oregon and Idaho filed with the Interstate Commerce Commission a formal complaint charging that the new rates on fruit from the Pacific Northwest to eastern consuming markets were unjust, unreasonable and discriminatory, compared with rates from eastern producing sections. They presented the following table showing how the 25 per cent rate increase hurt them more than their eastern rivals:

RATES ON FRUITS AND VEGETABLES, C. L.—CENTS PER 100 LBS. RATES IN EFFECT JUNE 24, 1918

From To	N. Y.	Phila.	Buffalo	Chicago	St. Louis
Pacific Northwest points	100	100	100	100	100
Rochester, N. Y.	18	18	9	25	29½
Lockport, N. Y.	19½	19½	7	21.5	27
PROPOSED INCREASES					
Pacific Northwest points	25	25	25	25	25
Rochester, N. Y.	4.5	4.5	2.25	6.25	7.4
Lockport, N. Y.	3.8	3.8	1.8	5.4	6.8

Soon it was likewise pointed out that the rate increase would hit small shippers heavier than large shippers, in certain important cases. A small shipper usually forwards goods from a single point. A large shipper may have distributing warehouses or may have factories scattered thruout the country, filling each order from the nearest factory or warehouse. Such a shipper would have no high rates on

his shipments and hence no burden from a 25 per cent increase in his rates. The small shipper would suffer disproportionately, in the case of all his long distance shipments.

Some of the State Commissioners and intrastate shippers have been greatly discontented by the new minima on articles according to class. The intrastate minima established by the Minnesota State Commission ran from 1c first class to 2.4c sixth class. The new Western Classification minima, which it was proposed to apply to shipments within Minnesota, ran from 25c first class to 11c fifth class, to 5c class E.

For these hardships no redress has been found. However, a number of other complaints were heard and taken care of in supplement 1 to general order 28. The state classifications were allowed to apply on intrastate shipments. These classifications were found so much lower than the territorial classifications that to prescribe the latter would have meant an almost unendurable rate increase on vital commodities. Likewise the supplement withdrew the proposed cancellation of intrastate rates between points that had an interstate route.

The most serious complaint was that the $15 per car minimum would put an end to the haulage of great quantities of low-grade commodities; for example, fuel and building materials, and logs assembled to go to a sawmill. So the supplement excepted from this minimum all shipments of brick, cement, sand, coal, coke, logs, ore, gravel and stone.

9. *Passenger fares receive increase.*—The Director General's general order 28 raised, simplified and standardized the passenger fares of the country. An increase to 3c per mile for all fares under 3c was ordered for both interstate and intrastate travel on all Federal railroads. (Rates of over 3c were to remain.) Reduced fares, below 3c, were forbidden except in the case of round-trip tourist fares, travel to and from veterans' encampments (1c), soldiers and sailors on furlough or leave of absence (1c), children 5–12 years old (½ fare). Commutation fares, however, were advanced only 10 per cent. Stopovers were discontinued.

Roundabout routes, it was provided, might be specially authorized to meet the fares established by the shorter mileage of direct competing routes. Such fares on roundabout routes would of course average less than 3c per mile.

Both "what the traffic will bear" and "cost of service" dictated the new provision that passengers using parlor and sleeping cars should pay higher railroad fares. They *can* pay more as a rule. Moreover, it costs more to carry them because a given tonnage of Pullmans accommodates fewer passengers than the same tonnage of day coaches. Travelers in parlor or sleeping cars were now to pay an addition to the normal one-way fare of ½c per mile, passengers on tourist cars an addition of ¼c per mile. These charges were apart from the charge on seat or berth and the war taxes on fare, seat or berth. Excess bag-

gage is charged at 16⅔ per cent of the normal one-way fare, minimum 15c per 100 pounds and a minimum collection of 25c per shipment. However, on December 1, 1918, the Director General abolished the extra railroad fare for Pullman, sleeping and parlor car passengers.

A real accommodation introduced by the Director General is the issuance of mileage scrip (500 or 1000 miles) at 3c per mile, plus the eight per cent government transportation tax. The mileage books are universally good on Government-controlled railways

REVIEW

Explain the relationship between capitalization and rates.

What is the purpose of a valuation of railroads by the Interstate Commerce Commission? Discuss whether you believe such valuations to be useful in determining rates or in compensating carriers if the railroads become government owned.

Discuss the cost-of-service theory of rate making. Why do freight rates, per ton mile, naturally decrease with distance?

How are freight rates in the United States calculated?

What were the contentions made by commissions and shippers against increased freight rates?

CHAPTER VI

CLASSIFICATIONS

1. *Place of classification in rate-making.*—Railroad charges are based upon what the traffic will bear. The distribution of railroad charges among different localities is performed by means of tariffs. The more distant place is generally charged a higher rate than a nearer place is charged for the same article. Exceptions to this rule are caused by water competition, or by the mere fact of railroad competition, where one railroad is a roundabout route.

Proper apportionment of railroad charges among articles, according to what they can bear, is made by means of classification. If every article which a railroad stands ready to transport were given a separate rating, there would obviously be an appalling multitude of ratings. In actual practice, ten or fifteen ratings or classes are devised in a given territory, and articles of commerce are assigned to these classes.

The freight agent needs a tariff book and a classification book in order to quote a rate. The tariffs give the charges per 100 pounds applying for each class of goods between stations on the railroad's own line (if it is a local tariff), or between stations on the railroad's own line and stations on a connecting line (if it is a joint tariff). To ascertain in which of these

classes a given article is found, the classification book is used. In this book, all articles are alphabetically arranged, the carload minimum is shown, and the class according to which they are to be charged—C.L. and L.C.L.[1]—is indicated. In the classification books also is found a great variety of rules regarding mixed carloads, packing, responsibility of carriers for damage, etc. The equipment of a station agent or a shipper —if he maintains a traffic department—consists of a classification book for each of the territories to which he ships, a set of local and joint class tariffs, a set of tariffs covering special services, like switching or reconsignment, and a set of commodity tariffs (tariffs which are exceptions to the general class rate structure) applying on articles that he ships or receives.

2. *Origin of classifications.*—The idea of classifying items of freight according to the charges they could stand was borrowed from the system of charging tolls on the canals which preceded railroads. These tolls varied with the value of the article. The early idea was that the railroad would be similar to the canal, in that a company would supply a road-bed over which the shippers would move their own freight in their own vehicles or else in vehicles belonging to an independent carrier, like the canal boat owner. Such a system early proved impracticable to operate, in the case of railroads, and the railroad became both toll collector, for the road-bed, and collector of a carrier's charge for transportation.

[1] C. L. means "in carload lots." L. C. L. means "less than carload lots."

The earliest English railroad charters prescribed maximum tolls that could be collected by the railroads. When the roads began to collect a rate that consisted of a toll plus a haulage charge, they ranked the articles according to value. But the early classifications both in England and America were extremely simple. In 1847, the Nashua and Lowell was a 15-mile railroad. It had only one class and charged $1 per ton for the distance. The Boston and Worcester in the same year had four classes:

Coal, iron, lumber, manure.....4c per ton mile
Heavy merchandise (e.g., sugar, salt, butter) 6c
Groceries and dry goods.....6c to 8c
Light and bulky merchandise....6c to 10c

3. *Necessity for combining classifications.*—As the railroads extended and traffic grew, the number of classes and the number of items separately enumerated were increased. But every large railroad had a separate classification. An article from New York to Memphis might be first-class on one railroad, third-class on another, sixth-class on a third. Nobody knew where he stood and, in particular, where his competitor stood. Gradually the railroads in each of the three separate parts of the country came to adopt a common freight classification, just as they had earlier adopted a common gauge. By 1890, the three classification territories of today had come into existence: the Official, the Southern and the Western.

4. *Present machinery of classification.*—The South-

ern Classification book applies, in general, on all railroads south of the Ohio and Potomac rivers; the Western Classification applies on all roads west of a boundary formed by the Mississippi River from the Gulf to St. Louis, thence a line drawn thru Peoria and Chicago, thence the eastern shore of Lake Michigan. The Official Classification applies to all roads north of the Ohio and Potomac, and east of the St. Louis-Michigan line. The arrangement of articles in these classifications is continually changing, since new articles are constantly being added to the list and carload ratings lower than the L.C.L. rating are constantly being granted.

A classification committee composed of representatives of the railroads is in charge of these changes in each case. The Southern Classification Committee meets in Atlanta, the Western in Chicago, the Official in New York. In addition to these committees there has been a Uniform Classification Committee, to be later described, composed of five members constantly in session in Chicago, at work upon the consolidation of all classifications. Each classification committee is in practically continuous session. The decisions of the Western Classification Committee have been binding upon its member carriers; in Southern and Official territory the carriers have had to ratify the recommendations of their classification committees. The procedure for the committee meeting requires that shippers be heard regarding classification changes, before a decision is rendered.

The Interstate Commerce Act of 1887 did not give the Interstate Commerce Commission jurisdiction over railroad classifications as it did over railroad rates. Apparently Congress did not realize that discrimination between shippers could be effected by unfair assignment of their goods to the fixed classes of the classification. However, the Commission early took charge over classifications as well as over tariffs, and the railroads have never disputed that action. In the 1910 amendment to the Act, this jurisdiction was specifically conferred upon the Commission.

5. *Basis of classifications.*—The prime principle for the classification of an article is its value. Articles of high value, like dry goods, are classified first-class, for the transportation charge is a small part of their value and a high charge does not affect their movement. Lumber, since it is of lower value, is fifth-class. Finished materials are charged more than raw products. But, other things being equal, the cost of service comes into play and affects classification. For example, chairs, set up, are charged double first-class; knocked down (i.e., taken apart and packed flat) they are fourth-class.

The Interstate Commerce Commission in its Annual Report for 1897 stated and approved a list of reasons which affect the fixing of classification. Classification ratings vary according to whether commodities are crude, rough or finished; liquid or dry; knocked down or set up; loose or in bulk; nested or in boxes, or otherwise packed; if vegetables, whether

green or dry, desiccated or evaporated; the market value and shipper's representation as to their character; the cost of service, length and duration of haul; the season and manner of shipment; the space occupied and weight; whether in carload or less-than-carload lots; the volume of annual shipments to be expected; the sort of car required, whether flat, gondola, box, tank or special; whether ice or heat must be furnished; the speed of trains necessary for perishable or other "rush" goods; the risk of handling, either to the goods themselves or other property; the weights, actual and estimated; the carrier's risk and owner's release from damage or loss. The direction of traffic has no influence upon the general classification, but it has an influence upon the making of "exceptions" and commodity rates. In Chapter VIII we shall see how the transcontinental roads plead the preponderance of east-bound tonnage, and consequent westward movement of empty cars, as a justification for low commodity rates to the Pacific coast.

6. *Analysis of classifications.*—The Official Classification contains nominally six classes; the highest charge is for class 1. In reality, there are nine classes; the three extra ones are known as rule 25, which is 15 per cent below second class; rule 26, which is 20 per cent below third class; and rule 28, which is a variable fraction higher than fourth class. In Southern Classification territory, there are six numbered and seven lettered classes. In Western Classification there are five lettered and five numbered classes. It happens

that St. Louis, being on the border line of the three classifications, ships west by Western Classification, east by Official Classification and south by Southern Classification. Class rates from St. Louis to New York, Denver and New Orleans in cents per hundred pounds are given in the following table:

		Official Classification										
St. Louis to New York, 1,157 miles.	Class	1	2	3	4	5	6					
	Rates	132	115.5	87.5	61.5	52.5	44					
		Western Classification										
St. Louis to Denver, 931 miles.	Class	1	2	3	4	5	A	B	C	D	E	
	Rates	202.5	159	126.5	100.5	79	92.5	70	62.5	52.5	45	
		Southern Classification										
St. Louis to New Orleans, 930 miles.	Class	1	2	3	4	5	6	A	B	C	D	
	Rates	112.5	94	81.5	62.5	50	44	35	47.5	31.5	25	

Moreover, each classification provides additional elite classes which pay multiples of first-class rates. There are six of these multiple classes on Official Classification territory, and the multiples of the first-class rate which they pay run from 1¼ to 4. In the Western Classification field there are also six elite classes; in Southern territory, four.

7. *Exceptions to classifications.*—Before Government control, railroads whose business was highly competitive naturally hesitated to allow a classification committee to determine a large part of their charges. The roads protected themselves by reserving the right to file "exceptions to the general classification." Once the "exception" was filed by a road or an association of roads in a given territory, those who filed the exception proceeded to charge according to the exception and not according to the classification. The exception might provide that canned corn from

a certain point to a market should move at sixth-class instead of fifth-class rates, or the regular twenty-five cent minimum charge on any shipment in classification territory should be raised to fifty cents for certain traffic. A typical class tariff, giving class rates between groups of stations, had the following legend printed on its face: "Governed, except as otherwise provided herein, by the Official Classification, supplements thereto and reissues thereof, and by exceptions to such classification." "Exceptions to classifications", hidden in obscure places in tariff supplements, often served as concealed commodity rates. The new Consolidated Classification, described later, abolishes all such "exceptions." Commodity rates must now appear plainly, in separate tariffs.

8. *Commodity rates.*—The use of commodity rates furnishes another method of exempting goods from the operation of the classification. These rates are generally lower than the class rates, and apply only on the article specified between the points specified. Some goods move only on commodity rates; coal is an example of this type of goods. Some move on class rates in general, but between specific points are carried on commodity rates. It will be noted that a commodity tariff carries both the designation of article and distance charge, in distinction to class tariffs which specify no articles.

Reasons for the granting of commodity rates are, in the main, three. First, they are granted to commodities that move in great bulk between certain sec-

tions of the country, like grain, coal, lumber, oil, live-stock. Second, they are granted to allow short distance traffic in goods like brick and other building materials. Third, they are granted by a carrier to enable a manufacturer to reach some new market, where he cannot now sell, or to enable some new manufacturer to reach markets. This last use of the railroad commodity rate is not unlike the protective tariff, and, like the latter, is based on the theory that the fostering railroad tariff will be withdrawn when the infant industry grows up. But—just as is the case with the protective tariff—the time for withdrawal never comes. In 1899, the New York Central had 1,370 special commodity tariffs in force and a storm among shippers was aroused when in 1900 the road tried to abolish 175 of them. Most of the articles of commerce move on class rates, but so many bulky goods move on commodity rates that it is estimated that over 50 per cent of the volume of traffic in England, 60 per cent in Germany, and 75 per cent in the United States is carried on commodity rates.

P. J. McGovern, formerly Chairman of the Southern Classification Committee, gave before the Industrial Commission in 1900 as an interesting example of the reason for commodity rates, the case of a manufacturer of overalls in Atlanta. Overalls, in Southern Classification territory, moved in a high class. This manufacturer found himself unable to pay the class rate and meet competition in a single market, St. Louis. The difficulty could be solved in two ways,

either by de-classifying overalls, or giving them a special commodity rate applying only from Atlanta to St. Louis. If overalls were de-classified, they would move on a lower rate to all points in the south. This would mean a considerable sacrifice of revenue to the railroads, and an unnecessary one, for the manufacturer needed a lower rate only to St. Louis. That need was met by the commodity rate.

The railroads, privately operated, have honeycombed the rate structure of the country with commodity tariffs designed to "keep everybody in business." The advocates of such a policy insist that it has been a good thing for the development of the country. Its opponents point out that the granting of exceedingly low rates for long hauls has deprived communities of the right to supply adjacent markets, that is, has taken from them the natural advantages of their geographic location. It is also contended that this policy has overloaded the carriers with unnecessary cross-hauling of freight, every one selling in every one else's territory.

If the steel mills of Chicago produce enough steel for use in building operations in Iowa, why should the steel mills in Pittsburgh be granted exceptional commodity rates in order to enable them to ship steel down to Iowa almost as cheaply as Chicago? Chicago's natural advantage is annihilated. Is it the business of the carriers to so manipulate their rates as to equalize the natural advantages of competing centers?

The Supreme Court has authorized the Interstate Commerce Commission to take into account such "market competition" in the considering of applications of the carriers to disregard the long-and-short-haul clause of the Interstate Commerce Act. For example, points in Utah and Idaho ship sugar in carloads to Chicago for 43 cents per hundred pounds. The rate to Omaha, an intermediate point, is 50 cents per hundred pounds. The Omaha rate is a reasonable rate. Therefore, the rate to Chicago is less than a reasonable rate. It is granted for the avowed purpose of enabling Utah and Idaho producers to market their products in Chicago in competition with refiners at New Orleans and the Atlantic seaboard.

Probably the business of the country is so adjusted to the principle of "keeping everybody in business" that it would not be practicable to abolish all use of commodity rates to meet "market competition." But it should be practicable so to modify the Interstate Commerce Act as to eliminate "market competition", as justifying a violation of the long-and-short-haul clause.

9. *C. L. and L. C. L. rates.*—Not only does the classification book arrange the articles of commerce into groups, but it often specifies for an article that is shipped in carload lots (C. L.), a different class from that to which the same article is assigned if it is shipped in less-than-carload lots (L. C. L.). To specify a different class for an article according to quantity is called "giving it a carload rating." Car-

load ratings are much more frequent in Official than in Southern or Western Classification territories, as is evidenced by the following comparison, given in the *Railway Age Gazette,* September 8, 1911:

L. C. L. AND C. L. RATINGS BY TERRITORIES IN 1909.

	L. C. L.	C. L.
Southern Classification	3503	703
Western Classification	5729	1690
Official Classification	5852	4235

There are more articles in the Official Classification which habitually move in carload lots, than there are in the other two lighter traffic territories; hence the larger number of carload ratings. The number of carload ratings constantly grows. In 1877, among the trunk lines, there were only 24 C. L. ratings, and only 900 in the first Official Classification of 1899. The rate given to an article for which a separate class is not assigned in the case of carloads, is spoken of as an "any-quantity" rate. It is obviously superfluous to give a carload rating to every item in the list. Many items, such as leather hair crimpers, would seldom if ever move in carloads. An invariable condition of a carload rating is the specification of a minimum that must be loaded into a car, in order to earn the lower carload class. In Official Classification territory, this carload minimum, when not otherwise specified, is 30,000 pounds. If the quantity offered more than fills a car, the overflow is taken in a separate car but at the C. L. rating. It should be noted that practically all the low commodity rates are for

carload lots only. C. L. and L. C. L. rates have been described as the wholesale and retail prices for transportation.

Carload ratings are generally established with regard to the tonnage on given articles that can be loaded into an average freight car. It might be possible to load 50,000 pounds of lard into a car that would not contain over 20,000 pounds of hay, which is much bulkier. In a case before the board of Canadian Railway Commissioners, the Chairman of the Canadian Freight Association succinctly stated the position of the railways, regarding minimum weights for carloads.

All articles are provided with a less-than-carload rating, but only those which are generally and to some extent forwarded in straight carload quantities are given the carload rating. . . . In order to entitle a shipper to the lower carload rating, when it is provided in the classification, the rules require that a full straight carload, subject to certain minimum weights, which are destined to produce adequate per car revenue, be forwarded by one shipper from one station on one day to one consignee and destination. . . .

When the character of the freight, size of the package, method of packing, weight of the goods, strength or fragility, vary so greatly, it is impossible to fix by rule a minimum weight which will in all cases exactly correspond with, and not in some cases exceed, the actual quantity which can conveniently be put in a car. It is impracticable by rule to confer the benefit of the carload rate without the use of a minimum weight. In the case of heavy coarse freight, the shipping public find no difficulty in loading up to, and even in excess of, the minimum weight. There are no commercial transactions which interfere with this being complied with. In the case of light bulky freight, the weight-

carrying capacity of the car is disregarded, and the loading capacity generally determines the minimum weight, but always subject to its application resulting in a fair per car revenue. This is essential in order to prevent the necessity of hauling a lightly loaded car and to obtain economy in the use of equipment and yard facilities. A less-than-carload consignment is charged for its actual weight at the higher less-than-carload-rate, unless the total charge exceeds the charge based upon the actual minimum weight and carload rate, in which event the lower charge governs. At no time does a charge on a less-than-carload lot exceed the charge for a carload of the same class.

10. *Why the roads can make C. L. rates.*—The basis for the difference between the charges for C. L. and L. C. L. is that C. L. is loaded by the shipper [1] into a car standing on his own siding or on one of the railroad's open team tracks, while L. C. L. is handled thru the railroad's freight shed and stowed in the car by the railroad's own employees. So on C. L. the railroad saves a large part of the terminal expense attached to L. C. L. freight. The road must switch the C. L. car to or from the team track or shippers' siding, where it was loaded, but the expense of handling the freight is spared. Therefore, the road can afford to grant a lower rate per 100 pounds. Moreover, the carload minimum prescribed for the individual shipper is much higher than the average loading of cars into which the railroad consolidates L. C. L. delivered by many shippers, so C. L. loaded by the shipper assures a fuller loading of the car. In one of its

[1] An exception is C. L. received at pier stations of railroad carriers, as at New York. (See Chap. XIII.)

decisions, the Wisconsin Railroad Commission estimated that in the State of Wisconsin, the average C. L. loading was 17 tons while the average carload of L. C. L was 6 tons. In its report on this case it said:

> On one of the principal carriers in the Western Classification territory, the average terminal cost per cwt. amounts to about 2.3 cents, when the loading amounts to 17 tons per car and to almost 5.8 cents when the loading amounts to 6 tons per car, while the average cost of moving the freight between the stations amounts to about 0.26 mill per cwt. when the car is loaded with 17 tons and to about 0.44 mill per cwt. when it is loaded with 6 tons of freight. On these bases, for a haul of two hundred miles, there is a difference in favor of the carload traffic that amounts to about 7 cents per cwt. We feel quite justified in saying that the less-than-carload traffic is relatively less profitable to the carriers than the carload traffic, and that the higher rates for the former are more than offset by the greater cost of handling it.

11. *Relation of C. L. rates to competition.*—The difference in class and in rates between C. L. and L. C. L. has a decided influence on competing shippers. For example, the granting of carload rates in Official Classification territory took the jobbing trade away from eastern centers like New York and heavily decentralized the jobbing trade of the Middle West. The retail grocer in La Porte, Indiana, buys coffee in less-than-carload lots. Suppose there were no carload rate on coffee in the Official Classification territory, that the any-quantity rate from New York to both Chicago and La Porte were 75 cents per 100 pounds and that the rate from Chicago to La Porte

were 10 cents. Under these conditions, the New York wholesaler would have the La Porte business, for he could deliver coffee at 75 cents per 100 pounds over the price at the seaboard. The Chicago wholesaler could not deliver it out of his stock for less than 75 cents, plus 10 = 85 cents per 100 pounds over the seaboard price, even if he charged nothing for carting it to his warehouse from the New York car and from his warehouse to the La Porte car.

Now, let coffee be given a class rating in carloads, which will insure it a rate of 45 cents from New York to Chicago. The Chicago wholesaler, then, can get the coffee in carloads from New York, distribute it back to La Porte in L. C. L. and undersell the New York jobber. The Chicago man will undersell the New York dealers not only at La Porte, but for a very considerable distance back toward New York. However, when the Chicago house tries to sell in the neighborhood of Indianapolis, it finds that the dealer there can be supplied cheaper from the latter point, because C. L. from New York to Indianapolis plus L. C. L. to the nearby point is less than C. L. to Chicago plus L. C. L. to the same point. This difference between C. L. and L. C. L. ratings and the wide extension of C. L. ratings in Official Classification territory has dotted that territory with large distributing centers and provided a local territory for every little town that cares to enter the jobbing business.

In Western territory, where the carload ratings

were fewer, ambitious local distributing centers have suffered, particularly those situated between the Missouri River and the Pacific coast. There were plenty of carload ratings to points on the Mississippi and Missouri rivers from the East, where manufacturing and importing were largely concentrated, and plenty of carload ratings to Pacific coast terminals—because of the competition of the water routes. Therefore, an intermediate point like Denver or Spokane has had a hard time jobbing in its own territory in competition with St. Louis, St. Paul and San Francisco. In Chapter VIII, page 147, is given an illustration of the difficulties of Boise; today these intermountain cities are better situated.

A new or undeveloped territory always wants carload ratings assigned to it. Old established centers outside that territory oppose the granting of carload ratings which will lose them business. Hence it was the merchants in New York who opposed the carload ratings granted to Official Classification territory and that now oppose the extension of such ratings on traffic from the Atlantic seaboard to the South. It is sometimes claimed that any-quantity rates rest on sound public policy, because they allow the small shipper to compete on equal terms with his large rival, and so hinder the trend toward monopoly.

The extra-territorial application of the classifications—that is, on traffic moving between two territories, is apparently without system. In some cases, two classifications govern such a shipment for its dif-

ferent parts. The Central Freight Association issues a guide to classifications, containing twenty pages and listing these extra-territorial applications.

12. *Mixed carloads.*—A further complication exists in the form of various provisions for mixed carloads; that is, provisions allowing a carload rate for a car full of mixed freight. Such mixing is allowed in Official Classification territory, the whole carload to pay the carload rate per 100 pounds which belongs to the highest class article in the car—and paying for at least the carload minimum weight of that article. Western and Southern Classifications formerly allowed such mixing only for articles specifically designated, but in the Consolidated Classification the more liberal mixing privilege applies to all territories. The Official Classification attempted to limit this mixing privilege to one shipper—claiming that all the goods must *belong* to one shipper and move to one consignee. The Official refused to allow forwarders to get this mixing privilege in the case of car lots which they assembled from many shippers. The matter went to the courts and in the Sheldon case, before the Supreme Court, it was affirmed that the railroad cannot make this distinction. So the forwarder can assemble a mixed carload and ship it at the carload rate of the highest class component.

This is less favorable than the existence of a low carload rate for mixed freight, for, under the Official Classification arrangement, there is likely to be in the car some article taking a high carload rating which it

communicates to everything else in the car. In Texas, the State Railroad Commission, in order to aid the small Texas jobbers drawing supplies from New York via Galveston, has established a carload rating of 69c per 100 pounds on mixed freight such as goes to a small jobber or a general store, enroute from Galveston to Texas Common Points. This car may contain first-class freight, on which the L. C. L. rate is $1.29 (for example, to Dallas). The saving by consolidation is obviously large. Similarly, the boats from New York to Galveston have a special carload rate, for that service, of 89.5c per 100 pounds for a carload minimum of 24,000 pounds—the carload to consist of the same sort of mixed L. C. L. as the Texas commission's carload. The boat's L. C. L. rate is $1.15 for first class. The result of these two mixed carload privileges and of the extraordinary good boat service from New York to Galveston, is to hold for the New York trade a good share of the shipments to Texas Common Points—points beyond a certain radius from Galveston—in competition with jobbers of St. Louis and nearer points.

13. *Attempts at uniform classification.*—There has been constant demand for a uniform classification in this country. In 1887, a Railroad Board of Uniform Classification was formed. In 1890, it brought in a uniform classification that is said to have failed of adoption solely because the New York Central rejected it. Matters thereafter progressed slowly until 1907 when the Uniform Classification Committee be-

gan its continuous sessions. This committee worked toward uniformity of rules and regulations regarding the classification of freight, uniform descriptions of rated articles, uniform requirements as to packing and container requirements, and uniform minimum carload weights. In 1915 the Interstate Commerce Commission appointed a classification agent to assist in pushing forward the work. By 1917 the Uniform Classification Committee had already passed upon these aspects of about 80 per cent of the articles in each classification, and 8.5 per cent of the recommendations of this committee had been put into practice by the classification bodies.

14. *Consolidated Classification.* — In February, 1918, representatives of each of the different classification territories, and of the Uniform Committee, were called to Washington by the Railroad Administration and told to remain in service until they had produced a single classification book. On June 28 that "Consolidated Classification" was prepared and ready for submission to shippers and the Interstate Commerce Commission for their criticism prior to publication.

The Consolidated Classification publishes for all territories a single set of rules, identical descriptions of commodities, identical packing requirements and carload minima. Where carload minima previously differed in different territories, the highest was generally chosen. Many unused carload ratings, "paper ratings", were discontinued. Altho uniformity of

carload ratings for all territories was not achieved, over 10,000 such changes were proposed, most of them, of course, representing higher ratings. At the Boston hearings on the Consolidated Classification it was complained that the great number of increased ratings were the equivalent of a new rate advance. Each such increase represented the judgment of the representative of the classification territory in which the new rating applied. Certain of the proposed changes were dropped as a result of hearings held thruout the country.

Consolidated Classification No. 1 is the only classification book which shippers will need to use for interstate traffic. It consists of uniform rules and regulations, then an alphabetical list of commodities with three columns for the ratings that apply in the three territories. In his general order 28, Mr. McAdoo tried to abolish state classifications applying to intrastate shipments, and substitute in each state the classification of the territory including that state. Individual state railroad commissions, particularly in the South, successfully objected that whole industries would be ruined by the drastic advances in ratings resulting from the proposed change. So that part of general order 28 was revoked. State-made classifications, like state-made rates, have been a means of helping the producers and distributors in a state to monopolize that state's business in competition with outside competitors. It is an indirect method of levying a tax on goods moved in interstate commerce.

The framers of the consolidated classification felt that the appropriate time for prescribing *uniform ratings* for goods in all territories would not come until after the introduction of the new classification with its uniform rules, etc., had opened the way for a closer knowledge of transportation conditions.

The Territorial Classification Committees still exist and handle all changes in classification within their jurisdiction. These changes, when worked out, are sent on to the Consolidated Classification Committee, which makes uniform rules and descriptions applying to the changes.

15. *Reasons advanced for dissimilar classifications.* —P. J. McGovern, formerly Chairman of the Southern Classification, thus explained the fundamental reason for dissimilarity of classifications in different territories (Report of Industrial Commission, Vol. IX, p. 677):

A great deal has been said about a proposed uniform classification to govern all over the country. In my judgment that thing is not impossible, but I believe it to be impracticable, and I believe that if they had it they would find that it did not cure all their ills, that its value had been over-estimated. I have stated that I believe it would be impracticable. I will explain that. Ignoring all cases of exception sheets, just let us suppose that there are only three general classifications in the country now without any exceptions to each. Suppose that it was the duty of the Interstate Commerce Commission or the general committee, or of this committee, or any other body, to unify those three classifications and to bring them into harmony and, at the same time, not to violently disturb existing rates. Now, then, we would go about it something like this. We would

take the Official Classification, and the Western Classification and the Southern Classification, and we would go thru them item by item. Take cotton factory products. They are first class in the Western territory, they are third in Official territory, and they are today fifth in the Southern territory. Now how would we reconcile that?

Q. Now would there be a reason why it should be Class No. 1, and a much higher rate in the West than it is in the South and East?

A. There is an excellent reason. I do not know about the Western territory, but I can understand that out there it is purely a consuming territory. They are simply dry goods to them. There is no question of encouraging the development or growth of cotton mills. It is a simply dry goods proposition out there, and they have got it first class. The Official territory, where they are third class, is both a producing and a consuming territory, and the third class, I have no doubt, was a compromise in 1887, when they first made and adopted the official classification; a compromise on all the rates they had in force. I have explained as to our territory that we started out with sixth class, which is the lowest merchandise class. This was done to put these Southern mills on their feet. We afterward put it up to fifth.

The dry goods difficulty illustrates the inter-regional competition of railroads. The southern roads reserved the right to subsidize the textile industry on the principle of "keeping everybody in business." This is also a leading cause of the maze of commodity rates that make confusion in the whole rate situation. If uniformity of classification were enforced all over the country, the railroads would doubtless have to make "exceptions" or issue commodity rates that would go on protecting industries or localities now protected by differences in classifi-

cation. The situation would then be only nominally bettered.

REVIEW

What is the reason for the classification of freight?

Locate the main classification territories of the country.

What are some of the bases upon which goods are classified?

What is meant by "exceptions" to a classification?

Give an illustration showing why the railroads prefer to give a commodity rate rather than to de-classify a commodity.

Why is the carload rate lower than the less-than-carload rate?

Show how the carload ratings affect the jobbing centers in Official Classification territory.

What advantages have been derived from the "Consolidated Classification"?

CHAPTER VII

RATES IN OFFICIAL CLASSIFICATION AND SOUTHEASTERN TERRITORY

1. *Importance of studying specific examples of rate structure.*—As illustrating rates in the United States, it is profitable to examine the systems of the three important territories, Official Classification, Southern and Western, and the rates upon which the bulk of our exports and imports move. It is particularly important to note the relationship between rates of different localities in the same territory (the rate structure), which shows the manner in which distance is regarded, or disregarded, in the making of tariffs.

It may be stated as a general rule that local tariffs within a territory are pure distance tariffs. In New England, the Boston and Maine has a set of local tariffs which increase with the distance from Boston. An exception used to be formed by the tariff from Boston to Portland, Bangor and certain other Maine coast towns to which points there was boat competition. These thru rates were accordingly made low enough to meet the water competition, and the intermediate rates were higher. Then the Boston and Maine took out these "water-compelled" rates and the

water lines jumped their charges up to the new all-rail level. So also in the Central Freight Association territory, the Official Classification area between Buffalo, Pittsburgh and the Mississippi River,[1] local rates are made on a mileage basis up to seventy-five miles and from that point on they carry a reduced rate per ton mile.

2. *Percentage system.*—In this chapter, the term "trunk lines" will refer to lines between the Atlantic seaboard and Chicago or St. Louis. By 1874, there were four trunk lines into Chicago and they competed vigorously for the traffic to and from that terminus. This competition ruined their earnings and put the rate situation in a state of chaos. It was finally settled by two measures that are still in force. The most important object of competition was grain for export. This traffic was presumably divided equitably among the roads and the seaports they served, by means of the "port differentials", to be described in Chapter IX. The chaotic condition in rates between the West and New York was partly due to the fostering of adjacent points on rival western railroads, as distributing or shipping centers. Order was established in this chaos by the adoption of the MacGraham percentage system which had been devised by a rate clerk named MacGraham who was employed by the Pennsylvania.

[1] Note: Official Classification Territory has three subdivisions: New England Territory; Trunk Line Territory, between the seaboard and Buffalo-Pittsburgh; and Central Freight Association Territory, west thereof.

This percentage system bases all the thru rates in Official Classification territory on the fundamental New York-Chicago rate. In the original system, the New York-Chicago rate for each class of goods was taken as 100 per cent. Points east or west of Chicago took a percentage of the Chicago rate, which was based upon the shortest "worked or workable" route to New York compared with the mileage of the New York-Chicago short line. Thus there were 60 per cent rate points and 120 per cent rate points, with a great range of places in between. A 60 per cent point, for example, paid 15 cents when the Chicago rate was 25 cents.

3. *Operation of the percentage system.*—The railroads increased their earnings from these percentages (based on mileage) when they deducted the fixed terminal charges from the New York-Chicago rate before applying the distance percentages. This system was more just to the railroads. There is no reason why the charges for terminal expenses in the rate of a 60 per cent point should be 60 per cent lower than in the Chicago rate, for the terminal costs are probably the same in both cases. Only the charge for haulage should be lower. So the railroads deducted 6 cents (3 cents at each end) as the terminal costs of the New York-Chicago service. Taking 6 cents from a New York-Chicago rate of 25 cents left 19 cents for haulage. Sixty per cent of 19 cents equals 11.4 cents. Adding to this the fixed 6 cents terminal quota, we have a new rate of 17.4 cents for the old 60 per cent

point. It thereby becomes a 70 per cent point, for 17.4 cents is approximately 70 per cent of 25 cents. In this manner the present percentages were figured.

This percentage table was originally worked out to apply on traffic from competing points in the West to New York but it was later applied also on west-bound business. Shippers at points which did not enjoy the service of more than one railroad, paid a rate not exceeding the local rate to the nearest competitive point plus that point's rate to New York as determined by the percentage system. Naturally enough, many violations of the long-and-short-haul principle resulted, as, for example, the rate to New York from a local point which was on a direct line to Chicago, while the nearest common point was to the West. These violations of the long-and-short-haul principle were largely eliminated after the passage of the Interstate Commerce Act in 1887.

4. *Factors which modified the percentage system.* —This original percentage system was unsatisfactory for two main reasons. It proved impracticable to have varying percentages for points on north-south railroads in the Middle West, which cut all the trunk lines. Moreover, the trade rivalry of competing centers in that region forced the roads to equalize the percentages of competitors which were only slightly different. So there came to be a series of zones, instead of disconnected percentage points. The 60 per cent zone took in a large number of

points, as did the 100 per cent zone. The influence of the north-south railroads caused many zones to lie just west of one of these railroads; for example, the zones immediately to the west of the Cincinnati, Hamilton and Dayton; the Monon; and the Chicago and Eastern Illinois. The accompanying map, adapted from one published by Professor Ripley in his "Railroads: Rates and Regulation", shows the zone system fully developed.

The established percentages are subject to variation for another reason. As a center develops, it may be able to have its percentage reduced, because of the volume of traffic it offers. This has proved the case with Detroit, which was an 85 per cent point in 1876 and is a 78 per cent point now.

5. *Value of the percentage system.*—The percentage system helped to regulate rates between New York and points west of Pittsburgh. The next thing was to arrange for rates between Chicago and points east of Pittsburgh. This is done partly according to a zone system, in which the zones are called New York rate points, Albany rate points, etc. Rates from points immediately east of Buffalo and Pittsburgh are certain fixed amounts, in excess of the rates between Buffalo or Pittsburgh and western points. As a rule the percentages are the same on east-bound and on west-bound traffic. Exceptions may be noted, as in the case of Albany, whose rate to Chicago is 80 per cent of the New York-Chicago rate; reversed, the rate from Chicago to Albany is

96 per cent. Rates between two intermediate points, as from Detroit to Albany, are found by multiplying the Detroit percentage of the Chicago-New York rate (78 per cent) by the percentage which the distance Detroit-Albany bears to Detroit-New York.

In the adjustment of rates on articles of iron and el manufacture to eastern points from centers own as the Pittsburgh, Mahoning and Shenango lley, and Cleveland Districts, Pittsburgh is, by rea- of its location, its enormous production and di- rsity of manufacture, established as a basing point. 'ates from Pittsburgh to Chicago are 60 per cent of 'hicago-New York rates, and rates to other eastern 'nts are computed as percentages of Pittsburgh- w York rates.

After many years of controversy between compet- g manufacturers and rate wars between the rail- ways serving the several producing districts, fixed differences have been established whereby rates from the Mahoning and Shenango Valleys are 40 cents per net or gross ton higher than Pittsburgh rates, and from the Cleveland District they are 60 cents per net or gross ton higher than Pittsburgh rates to eastern points.

Similarly, rates from the Johnstown (Pennsylvania) District are fixed at 30 cents per net or gross ton less than Pittsburgh rates to eastern points. Rates from Buffalo, New York, are also established in relation to Pittsburgh rates and rates from Central and Eastern Pennsylvania mills are based upon the

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96 per cent. Rates between two intermediate points, as from Detroit to Albany, are found by multiplying the Detroit percentage of the Chicago-New York rate (79 per cent) by the percentage which the distance Detroit-Albany bears to Detroit-New York.

In the adjustment of rates on articles of iron and steel manufacture to eastern points from centers known as the Pittsburgh, Mahoning and Shenango Valley, and Cleveland Districts, Pittsburgh is, by reason of its location, its enormous production and diversity of manufacture, established as a basing point. Rates from Pittsburgh to Chicago are 60 per cent of Chicago-New York rates, and rates to other eastern points are computed as percentages of Pittsburgh-New York rates.

After many years of controversy between competing manufacturers and rate wars between the railways serving the several producing districts, fixed differences have been established whereby rates from the Mahoning and Shenango Valleys are 40 cents per net or gross ton higher than Pittsburgh rates, and from the Cleveland District they are 60 cents per net or gross ton higher than Pittsburgh rates to eastern points.

Similarly, rates from the Johnstown (Pennsylvania) District are fixed at 30 cents per net or gross ton less than Pittsburgh rates to eastern points. Rates from Buffalo, New York, are also established in relation to Pittsburgh rates and rates from Central and Eastern Pennsylvania mills are based upon the

rates applicable from Pittsburgh and Johnstown to common eastern points.

Thus the whole thru rate structure in the territory east of the Mississippi is built on percentages, that is, on distance, with careful regard for the long-and-short-haul clause.

6. *New England rates.*—By agreement among traffic associations, New England is accorded special concessions. West-bound all New England points have the same rates as New York to Cleveland and points west. This is a great advantage; it means the use of blanket rates for all New England. This equality of rates has been the cause of the high decentralization of industry in the New England section. Hence large establishments are found in out-of-the-way nooks in New England; no favored rates granted to larger New England cities have compelled industries to migrate there. Blanket rates are also enjoyed on traffic from New England to the Southeast, Southwest, and the Far West, including the Pacific coast. In the same way, rates from any point in the West to all New England points are identical. These rates into New England are differentials [1] above the New York rate as follows:

Class						
1.	2.	3.	4.	5.	6.	Commodities
7c	7c	2c	2c	2c	2c	2c

[1] A "differential" may be defined in general as a rate above or below the standard. A differential below the standard rate may be given to certain railroads which for any reason are handicapped in reaching terminal points.

Now it happens that Boston has accorded to it the same *export* rates from the West as New York. In 1888, the Boston Chamber of Commerce asked the Interstate Commerce Commission to force the railroads to give Boston the same *domestic* rates as New York, on the ground that this dissimilar treatment amounted to discrimination. The Commission refused (1, I. C. C. 536). It stated that export traffic was competitive between Boston and New York. If Boston had to pay a higher rate it would get no business. But the Boston manufacturer properly paid a higher rate on local business, justified by the greater cost of serving him. Therefore, the Commission approved the then existing arbitraries to Boston, over New York: namely, 11, 11, 5, 5, 5, 5, cents, which, as has been seen, were later reduced to 7, 7, 2, 2, 2, 2, cents.

It should be noted that the railroads elected to give New England the same rate, *west-bound,* as they had given New York, without regard to distance. The railroads may, if they choose, disregard distance in making rates—observing always the long-and-short-haul clause; but they cannot be forced to disregard distance. This furnishes an illustration of how much more the railroads can do voluntarily for a community or a shipper than they can be forced to do.

7. *Rates to and from Baltimore and Philadelphia.* —We have seen how Boston is ranked with respect to New York; it remains to indicate how the two other North Atlantic ports, Baltimore and Philadelphia,

stand. For considerations that are explained in detail in Chapter IX the early severe competition for grain between the North Atlantic ports, from Baltimore to New York inclusive, resulted in a set of "port differentials." On all grain from points west of Pittsburgh, Baltimore was allowed a rate of 3 cents and Philadelphia 2 cents under that of New York. The rate from the Middle-Western point to New York was calculated on the percentage basis already described, and the Philadelphia rate was found by subtracting 2 cents from the New York rate. These port differentials, established to equalize conditions in the export grain trade, were communicated to domestic traffic and so became part of the equipment of these cities in competing with each other for domestic business.

With regard to the west-bound traffic of Baltimore, Philadelphia and New York there is also a set of differentials, identical with those for east-bound, except for the first two classes. The west-bound differentials under New York read:

	Classes						
	1.	2.	3.	4.	5.	6.	Commodities
Baltimore	8	8	3	3	3	3	3
Philadelphia	6	6	2	2	2	2	2

These established differentials were slightly disturbed by the 25 per cent rate increase of June, 1918. The rates were increased by the issue of blanket supplements of each carrier and each joint tariff agent. The supplements showed in one column all

rates from one cent up, and in a parallel column the new rates, each 25 per cent over those in the first column. It is obvious that 25 per cent added to a higher rate produces a greater advance than when added to a lower one. For example, the old first-class rates from Chicago were 90 cents to New York, 87 cents to Baltimore, the differential being 3 cents. The new first-class rates were 109 cents to Baltimore and 112½ cents to New York, the differential being increased from 3 to 3½ cents. Such matters are being readjusted by the Railroad Administration as fast as may be, the attempt being to restore differential relations.

The current rates applying between Chicago and the seaboard cities are as follows:

RATES BETWEEN CHICAGO AND EASTERN CITIES, EAST AND WEST BOUND. CENTS PER 100 LBS.

Between Chicago and		1.	2.	3.	4.	5.	6.
New York	E. B., W. B.	112.5	99.	75.	52.5	45.	37.5
Boston	W. B.	112.5	99.	75.	52.5	45.	37.5
Philadelphia [1]	E. B., W. B.	110.	96.5	72.5	50.	42.5	35.
Baltimore [2]	E. B., W. B.	109.	95.	71.5	49.	41.5	34.
Boston	E. B.	121.5	106.5	81.5	57.5	49.	40.

[1] Philadelphia, West-bound, first class, 105c; second class, 91c.
[2] Baltimore, West-bound, first class, 103c; second class, 89c.

8. *Differential routes in trunk line territory.*—Another outstanding feature of traffic conditions in this territory used to be the great number of routes over which that traffic can move. The more roundabout of these routes were allowed "differential" rates, under the standard all-rail rate, in order to offset the disad-

vantage of slower service. For example, traffic could move west from Boston by the standard all-rail routes, the New Haven, the Boston and Albany or the Boston and Maine and their connections west of the Hudson River. These standard rates were identical with the standard all-rail rates from New York, namely,

Classes					
1.	2.	3.	4.	5.	6.
90	79	60	42	36	30

But there were lower rates to the West via the following routes which were allowed differentials: all-rail thru Canada, lake-and-rail via Buffalo, a still lower lake-and-rail via Canadian Georgian Bay ports, ocean-and-rail via Virginia ports. New York had a similar set of differential routes. Philadelphia and Baltimore had lake-and-rail and ocean-and-rail differential routes. The routes and rates to Chicago from the chief North Atlantic ports, as effective before general order 28 abolished all but two of the differential routes, are given in the following table:

CLASS RATES PRIOR TO JUNE 25, 1918—ATLANTIC SEABOARD TO CHICAGO — VIA ALL ROUTES

FROM	CLASSES					
NEW YORK	1	2	3	4	5	6
All rail	90	79	60	42	36	30
Standard rail and lake; and ocean and rail, via Virginia ports or Canada, during open navigation on the Lakes	80	71	54	38	32	27
Differential rail and lake	70	63	48	34	29	25
Canal and lake	70	63	48	34	29	25
BOSTON						
All rail	90	79	60	42	36	30
Standard rail and lake, and ocean and rail—open navigation on lakes	85	75	57	39	34	29
Differential rail and lake	75	67	51	35	30	26
All-rail differential lines	85	75	57	39	34	29

PHILADELPHIA						
All rail	84	73	58	40	34	28
Rail and lake	74	65	52	36	30	25
Ocean and rail	76	67	54	37	32	26
BALTIMORE						
All rail	82	71	57	39	33	27
Rail and lake	72	63	51	35	29	24
Ocean and rail	74	65	53	36	31	25
NEWPORT NEWS						
All rail (domestic)	74	65	53	36	31	25
All rail (import)	74	65	53	36	31	25

East-bound there were differentials only on the lake-and-rail route or the ocean-and-rail route (via Virginia ports). Flour, lake-and-rail, came east 2 cents per 100 pounds lower than all-rail. The east-bound lake-and-rail and ocean-and-rail class rates were:

CHICAGO TO NEW YORK. CENTS PER 100 POUNDS

	1	2	3	4	5	6
Lake-and-rail	82	73	56	39	34	28
Ocean-and-rail	87	76	57	39	34	28

Today all these differential routes have disappeared under Government ownership, excepting the all-rail differential route from New England west, varying from 5 cents to 1 cent below the standard; and a canal-and-lake differential to the West from New York, varying considerably below the all-rail. Also, there are a few lake-and-rail differentials still in effect. Duluth is given the lake-and-rail rate of Chicago, tho their rail rates differ. St. Paul is likewise accorded a lake-and-rail differential. The present situation, so far as it affects New York, is illustrated by the following compilation prepared by the New York Merchants' Association:

COMPARATIVE STATEMENT SHOWING RATES BEFORE AND AFTER JUNE 24, 1918, FROM NEW YORK TO REPRESENTATIVE WESTERN POINTS

	Via	Classes 1	2	3	4	5	6
To Buffalo, New York—	All rail—old	48	41.5	34	23	19.5	16
	Canal—old	48	41.5	34	23	19.5	16
	All rail—new	60	52	42.5	29	24.5	20
	Canal—new	48	41.5	34	23	19.5	16
To Cleveland, Ohio—	All rail—old	64	56	42.5	30	25.5	21.5
	Canal and lake—old	64	56	42.5	30	25.5	21.5
	All rail—new	80	70	53	37.5	32	27
	Canal and lake—new	75	66	50	35.5	30	25.5
To Detroit, Michigan—	All rail—old	70	61.5	47	33	28	23.5
	Canal and lake—old	70	61.5	47	33	28	23.5
	All rail—new	87.5	77	59	41.5	35	29.5
	Canal and lake—new	82.5	73	56	39.5	33	28
To Chicago, Illinois—	All rail—old	90	79	60	42	36	30
	Rail and lake—old	90	79	60	42	36	30
	Canal and lake—old	90	79	60	42	36	30
	All rail—new	112.5	99	75	52.5	45	37.5
	Rail and lake—new	112.5	99	75	52.5	45	37.5
	Canal and lake—new	102.5	91	69	48.5	41	34.5
To Duluth, Minnesota—	All rail—old	130	113	86	60	52	43
	Rail and lake—old	90	79	60	42	36	30
	Canal and lake—old	90	79	60	42	36	30
	All rail—new	162.5	141.5	107.5	75	65	54
	Rail and lake—new	112.5	99	75	52.5	45	37.5
	Canal and lake—new	102.5	91	69	48.5	41	34.5
To St. Paul, Minnesota—	All rail—old	130	113	86	60	52	43
	Rail and lake—old	111	97	73	50	43	35
	Canal and lake—old	111	97	73	50	43	35
	All rail—new	162.5	141.5	107.5	75	65	54
	Rail and lake—new	139	121.5	91.5	62.5	54	44
	Canal and lake—new	129	113.5	85.5	58.5	50	41

Chicago rates apply to Milwaukee.
Duluth rates apply to Superior, Wis.; Dollar Bay, Hubbell, Hancock and Houghton, Michigan.
St. Paul rates apply to Minneapolis, Eau Claire, Wis., and Stillwater, Minnesota.

9. *Basing point system in Southeast.*—A markedly different method of rate structure, the basing-point system, applies to points in Southern Classification territory, lying south of the Ohio and east of the Mississippi. To avoid unnecessary detail it will be preferable to confine the discussion to one section of the large Southern territory; namely, the Southeastern Freight Association territory, lying south of the Ohio and the Potomac and east of a line drawn thru Cincinnati, Knoxville, Chattanooga, Birmingham, Montgomery and Pensacola.

10. *How the basing point system developed.*—The

South had begun to build up when railroads were first introduced into this country. The great distributing centers for the South lay around its edges—Mobile, New Orleans, Memphis, St. Louis, Louisville, Cincinnati, Baltimore, Charleston, Savannah and Jacksonville. The interior of the South was reached by the rivers at whose navigable heads secondary distributing points and concentration points—primarily for tobacco and cotton—arose. Such secondary distributing points were Augusta on the Savannah; Macon on the Ocmulgee; Columbus, Georgia, on the Chattahoochee; Selma on the Alabama; Demopolis on the Tombigbee; Chattanooga on the Tennessee, and Nashville on the Cumberland River. The rates paid on goods from Louisville to a point interior from Nashville were the water rates from Louisville to Nashville plus the wagon charges into the interior. Nashville was a basing point. Rates to points near Nashville were the Nashville rates plus the local hauls. This is the system which the railroads found and perpetuated.

The earliest railroads were constructed into southern territory from the great competing centers on its edge: from Charleston to Hamburg, opposite Augusta, to steal the trade of Augusta, which had previously been moving between Augusta and Savannah up the Savannah River; from Louisville to Nashville, designed by Louisville to monopolize the Nashville trade, which formerly could move up the Cumberland from Evansville or St. Louis as easily

as from Louisville; and the road from Savannah to Macon, designed to draw off the trade of Macon that had been moving down the Ocmulgee River.

Long before thru rail lines were in operation, from the North to the Southeast, the bulk of the northern traffic to these interior points was already moving via ocean-and-rail; by ocean to Charleston, Savannah or Jacksonville, thence by rail into the interior. The interior jobbing points were those already established at the heads of navigation on the rivers. Rates from the North by rail to the competitive jobbing centers were then made lower than to surrounding points, lower even than to intermediate points. That is, the railroad rates simply fitted themselves into the established situation.

11. *Operation of the basing point system.*—The total number of southern basing points came to include much more than the old water points. The network of railroads formed in the South created many junctions which railroad interests made basing points, putting them upon a par with the heads of navigation. Such a railroad junction is Atlanta, early the crossing of three roads, which, because of its exceptional railroad service, became the most important city in the South. The rates from New York to Atlanta came to be the fundamental rates to Southeastern territory, just as the New York-Chicago rates are fundamental in Official Classification territory.

Practically all traffic into Southeastern territory moves on Southern Classification.

12. *Water and rail competition.*—There is an excellent coastwise service to Norfolk, Charleston, Savannah, Brunswick and Jacksonville from Boston, New York, Philadelphia and Baltimore. The various services are divided between the Merchant's and Miner's Transportation Company, the Clyde Line, the Mallory Line, the Old Dominion Steamship Company, the Ocean Steamship Company of Savannah (Savannah Line).

The first-class water rate from New York to Norfolk is 53c, to Charleston 82c, to Savannah 82c, to Jacksonville 96.5c. Philadelphia and Baltimore have rates identical with those from New York to Charleston and ports farther south, while Boston has rates that are higher by differential which, for first class, is 5c. To Norfolk the same all-rail as all-water rates apply to all ports, Boston to Philadelphia inclusive; the all-water rates to the other southern ports are less than the all-rail rates.

The rate from New York to Atlanta is the same by all the ocean-and-rail routes, via any port, from Norfolk to Jacksonville. The New York-Atlanta water-and-rail class rates, the Baltimore water-and-rail rates and the rates from other all-rail competitive points, are governed by the Southern Classification.

TO ATLANTA

From		Classes Cents Per 100 Pounds									
		1	2	3	4	5	6	a	b	c	d
New York	Ocean and Rail	150	129	112.5	96.5	79	65	52.5	64	52.5	47.5
Baltimore	Ocean and Rail	141.5	121.5	106.5	90	74.5	61.5	50	60	49	44
Louisville	All Rail	134	115	101.5	85	70	57.5	46.5	56.5	45	40
Cincinnati	All Rail	134	115	101.5	85	70	57.5	46.5	56.5	45	40
New Orleans	All Rail	134	115	101.5	85	70	57.5	46.5	56.5	45	40

At first the all-rail lines from New York to the Southeast tried to meet the competition of the ocean-and-rail routes, but it was a hopeless proposition. A compromise was made and for a long time the differentials, ocean-and-rail and all-rail, ranged from 12c to 5c per 100 pounds, according to the class. At the present time these differentials, applying from all the north Atlantic ports from New York to Baltimore inclusive, are as follows:

SOUTHERN CLASSIFICATION

Classes	1	2	3	4	5	6	a	b	c	d
Differentials	6	5	5	4	3	2	2	2	2	2

The Boston rates, both all-rail and ocean-and-rail, are higher than New York's by a differential that is 5c per 100 pounds first class, and runs down to a smaller amount for the lower classes.

13. *Competition of all-rail with rail-and-ocean routes.*—Philadelphia is on a parity with New York in rates to Atlanta, while from Baltimore the rates are lower, commencing with 7c on first class.[1] Until very recently Louisville, Cincinnati and Baltimore were kept on a parity by the fact that Baltimore's ocean-and-rail was kept equal to Louisville's all-rail —all of them had the rates then current from Louisville and Cincinnati as shown in the above table. This was a recognition of the balancing necessary to keep peace in the competition for the privilege of supplying

[1] These differentials are temporarily disturbed by the operation of the 25% blanket rate increase as already described. For example, the first class differential of Baltimore in the table above is 8½¢. instead of 7¢.

the South. Louisville and Cincinnati are two Ohio River crossings. Rates to the Southeast from points north of the Ohio are generally combinations of the local rates to the Ohio River crossings, plus a given rate from there to destination. But the points interior from the north Atlantic ports are better off than the interior western points. The Southern coastwise lines publish thru rates to the Southeast from all points in New England and Trunk line territory east of Buffalo and Pittsburgh. Points in these territories are given small differentials (far less than the local rates) over the flat Boston or New York rates, the coastwise lines absorbing the rates of the rail lines from the interior to Boston or New York.

The rates of other competitors for the trade for the Southeast hold a fixed relationship to the rates already described. St. Louis pays to the basing point rates higher than Louisville or Cairo by differentials that vary from 23c to 5c, according to class. Nashville and Memphis have differentials under Louisville; New Orleans has the same rates as Louisville, while Mobile has a differential under New Orleans.

The whole system originally depended on the fundamental New York-Atlanta ocean-and-rail rates. Rates to other points than Atlanta were fixed at the Atlanta rates, or differentials by class under or over the Atlanta rate. Rates to points in the Southeast which were not basing points were fixed at certain differentials or locals over the rate to the nearest basing points.

All this was changed by the Interstate Commerce Commission's Fourth Section Order 3866 (see page 138). The carriers were required to readjust their rates to the Southeast in accordance with the Fourth Section. The whole structure of rates in this territory has already been revised and is being published in accordance with the Commission's order, tho probably another year will elapse before the work is completed. In the main, the Commission condemned the basing point system, with its violations of the long-and-short-haul clause, excepting as it applied to points which had actual or potential water competition from the North. Rates to all other basing points are being adjusted in strict conformity with the long-and-short-haul clause.

Class rates were published January 1, 1916, conforming to the Commission's order, but commodity rates are still being revised.

14. *Variations in class rates.*—This class rate structure has been varied in order to enable certain southern products to reach desired markets which they could not reach if they moved on class rates. For example, there are low commodity rates on lumber to Cairo, an Ohio River Crossing, to enable Southeastern lumber to sell to the Middle West in competition with lumber from Arkansas. There are low rates on pig iron into the Middle West and to New England, to enable Birmingham to compete with the Pittsburgh smelters. The commodity rates on cotton piece goods from the mills of Georgia, Alabama and the Carolinas allow

the goods to be delivered in Chicago at rates which are competitive with the blanket rates from New England points. Above everything else, the main bulky products of the Southeast, cotton and lumber, do not move north on thru rates but on local rates to the seaboard, thence to northern ports by low vessel rates that vary with the supply of vessel tonnage offered.

15. *Violations of the long-and-short-haul clause.*—The southern basing system resulted in violations of the long-and-short-haul clause, which as a rule forbade charging more for the shorter haul than for the longer haul that included the shorter. The rate from New York to Augusta was lower than the rate to an intermediate point fifty miles east of Augusta. But there was water competition from New York to Augusta, none to the nearer point. The dissimilarity of conditions was supposed to justify the violation of the long-and-short-haul clause as it stood in the original act of 1887. (Section 4):

> It shall be unlawful for any common carrier subject to the provisions of this act, to charge or receive any greater compensation in the aggregate for the transportation of passengers, or of like kind of property, *under substantially similar circumstances and conditions*, for a shorter than for a longer distance over the same line or route in the same direction, the shorter being included within the longer distance.

16. *Decision of the Interstate Commerce Commission on the basing point system.*—The Interstate Commerce Act was amended on June 18, 1910, when

the words "under substantially similar circumstances and conditions" were omitted. This would have forbidden all deviations from the long-and-short-haul rule if the Interstate Commerce Commission had not been empowered, by the same amendment, to grant exceptions to the rule when they saw fit. Every violation now has to be especially justified by a railroad. Formerly the Southern basing point system was not called into question until some individual feature of it was attacked by a shipper.

As a result of the 1910 Amendment there was a flood of applications from carriers to be relieved from the application of the Fourth Section. Most of the demands came from the South. The Southern carriers, in a body, petitioned for relief and begged for permission to continue their basing point system. They succeeded in showing that a literal enforcement of the long-and-short-haul rule would cause to Southern carriers an annual loss over $12,000,000. The Commission in its decision (30 I. C. C. 153) refused to approve the basing point system except for Southern basing points which had real water competition, or which might at any moment have it. The Commission ordered the rate readjusted in accordance with the principles already explained at the end of Section 13.

17. *Further modification of southeastern rate structure.*—The end of modifications in the southeastern rate structure is not yet in sight. In its decision in

the 15 per cent case, rendered in June, 1917, the Inter-State Commerce Commission suggested that carriers might increase their water-and-rail rates to the all-rail level. They were later authorized to increase their all-water rates to the all-rail level. As has already been seen, this measure has been taken in the case of the lake-and-rail and ocean-and-rail rates between the Atlantic seaboard and the West. Ocean-and-rail rates to the Southeast have not been so far advanced.

Indeed, such an advance in Southeastern rates would very seriously hamper the North Atlantic states in doing business there, unless all-rail rates from the Central West were correspondingly advanced. For example, the historic adjustment has been for Baltimore's first-class ocean-and-rail rates to the Southeast to be 12 cents below the all-rail from Baltimore and identical with the all-rail from Louisville. Baltimore claims that an injustice was done her when this parity with Louisville was abolished in 1917 by raising its ocean-and-rail rates to 6 cents. Baltimore's power to compete would wholly cease if its ocean-and-rail rates were advanced to its all-rail basis, 12 cents over Louisville. Yet the Railroad Administration contemplated eliminating all water-and-rail differentials during the period of the war.

18. *Withdrawal of differentials a temporary measure.*—New England complained bitterly that elimination of these differentials would put it out of business

in the Southwest and Southeast, unless its competitors' all-rail rates to the same territories were correspondingly raised.

It was not likely that these differentials would disappear permanently, even tho they were to be dropped temporarily in the interest of railroad war revenue, since they are based on lower operating cost than the all-rail. It was never likely that the Government would permanently use its ownership or control of rail-and-water routes to deprive localities on waterways of the advantage of their location.

Baltimore and New England, in these instances, are as dependent upon these water-and-rail rates as other localities are dependent upon their all-rail rates. Little freight in normal times is shipped into the Southeast all-rail from the North Atlantic seaboard. The withdrawal of these fundamental rates would not be in accord with the Director General's intimation that the 25 per cent rate increase should not be allowed to interfere with established rate structures. He said:

> In making the advances effective from the date specified, a simple form of tariff will be used, and this will lead to temporary disregard, to some extent, of established groupings and differentials. It was the intention to observe such groupings and differentials so far as practicable, and hereafter, with as much dispatch as possible, to restore any important relationships which may, for the time being, be disturbed.

REVIEW

Explain the original, as well as the present percentage system in Official Classification Territory.

Describe the rate structure applying between New England and the West.

Describe the differentials of Philadelphia and Baltimore under New York on west-bound domestic traffic.

What changes were made by the rate increase of June, 1918?

Describe standard and differential routes of the West from New York City, as existing prior to the government operation of the railroads.

What is the origin of the basing point system in the Southeast?

How was it modified by the decision in the 15 per cent case?

Explain the part which the New York-to-Atlanta ocean-and-rail rate plays in the rate structure of Southeastern territory.

CHAPTER VIII

TRANSCONTINENTAL RATES AND THE PANAMA CANAL

1. *Effect of water competition on transcontinental rates.*—The origin of the transcontinental rate situation, whose dominant element has been water competition from New York to San Francisco, is excellently stated in the 1911 Annual Report of the Interstate Commerce Commission (page 27):

When the discovery of gold first brought California into prominence, the only means by which freight could, as a practical matter, be transported from territory east of the Rocky Mountains to the Golden Gate was by sailing ships around Cape Horn. For many years this continued to be the usual and ordinary means of transportation.

The first transcontinental railroad found at San Francisco a great and thriving community dependent largely upon the East for its manufactures and for many of its supplies, and bringing those entirely by this water route. The first task of the transcontinental line was to wrest this traffic from the water carrier.

In order to take traffic from the Atlantic Seaboard, the rail carrier was obliged to make, not necessarily as low a rate, but one on the whole as favorable as the shipper could obtain from the water, and earlier rates from that territory to San Francisco were entirely governed by these considerations.

At first the only available water transportation was that afforded by the clipper ship around the southern extremity of South America, but later other water routes were opened.

First after the clipper ship came the Panama route, in which the Panama Railroad across the Isthmus of Panama furnished a link. By this route, traffic was carried by steamship from New York to Colon, thence by rail from Colon to Panama, and thence by ship to San Francisco.

Since New York has usually been the only port of departure for this water-borne traffic upon the Atlantic, and San Francisco the principal port upon the Pacific Coast, these two cities are treated as typical.

The next advance in these water routes was effected by putting on a line of *steamships* which plied between New York and San Francisco thru the Straits of Magellan. These boats took the place of the sailing vessels, over which they were a great improvement. By this means, freight could be carried in from sixty to ninety days from New York to San Francisco.

The last route to be opened was that via the Tehuantepec Railroad, which is owned and operated by the Mexican Government across the lower extremity of Mexico, a distance of 180 miles. By this route traffic is taken from New York to Coatzacoalcos, thence by rail to Salina Cruz, and thence by water to San Francisco. This is today (1911) the favored route over which large quantities of traffic are actually moved.

The water rate, in cents, per 100 pounds, by all these routes, has always been somewhat lower than the rail transcontinental rates from New York to San Francisco. The Commission has found, and of this there can be no question, that this water transportation has limited the rate which could be obtained by the carriers between New York and the Pacific coast terminals.

2. *Effect of water competition on rates to western interior points.*—In meeting the low rates of the water routes from coast to coast the transcontinentals did not want to sacrifice their revenues to and from interior points in the West. There was no direct

water competition from New York to Reno, for example. The best that the water route could do for Reno was to deliver goods at the New York-San Francisco rate plus the local railroad rate from San Francisco back to Reno. This was the situation which the railroads had to meet and they met it by charging Reno, and other interior points west of the mountains, rates which were a combination of the coast-to-coast rail rate, as forced down by the water competition, plus a low rate for the haul back to wherever the goods might be consigned. This resulted in a higher rate from New York to Reno than to San Francisco, which was, of course, an apparent violation of the long-and-short-haul clause of the Act to Regulate Commerce. However, the conditions of the two cases were considered so dissimilar that, up to the time of the 1910 Amendment to Section 4, Reno and other interior western points had no redress.[1]

The same reasoning that gives Reno higher rates from New York than San Francisco paid, would also have given Chicago higher rates to San Francisco than New York paid. The best that the water route could do for Chicago was to deliver its goods on the Pacific coast at the local rail rate from Chicago to the eastern seaboard plus the water rate from the east to the west coast. The railroads to the coast could have met this by charging to San Francisco from Chicago the New York-San Francisco

[1] Not only San Francisco, Portland, etc., but over 200 near-coast cities like San Francisco came to be ranked as Pacific Coast Terminals.

rail rate plus the Chicago-New York rate. Such an adjustment would have made it impossible for Chicago and the Middle West to compete with New York for Pacific coast business, just as a similar adjustment made it impossible for Reno or Spokane to grow up as distributing centers in competition with San Francisco and Seattle.

But the Middle West was too powerful to be so treated. Cities of the Middle West even claimed the right to lower rates to the Pacific coast than New York had to pay, on the ground that they were nearer, by rail.

3. *Position of the Middle West.*—The interests of the Middle West in this respect were parallel with those of the transcontinental railroads themselves. The so-called "transcontinental" roads begin at the Missouri or the Mississippi River, or at Chicago. They would not endure a rate policy which would tend to perpetuate in the East the monopoly of manufacturing for the Pacific coast which the East enjoyed before the railroads were built. When transcontinental traffic originated in the East, the eastern trunk lines took 25 per cent for hauling it to Chicago, 33 per cent for hauling it to Omaha. The transcontinental roads were much better pleased to see the traffic originate at Chicago, St. Louis, St. Paul or Omaha, since these roads then received 100 per cent of the rate.[1] If a manufacturing population concentrated in the East consumed Pacific coast fruit, the eastern

[1] Particularly was this the avowed policy of the Santa Fe.

lines again had to be paid 25 per cent or 33 per cent of the rate for delivering the cars carrying this traffic. The transcontinentals could far better afford to deliver the cars for the same or a lower rate to a manufacturing population in Omaha or Chicago, retaining the whole 100 per cent of the rate. An offset to this situation, a situation which in general worked in favor of the Middle West, was found in the fact that New York had a transcontinental of its own which did not run thru the Middle West—namely, the Southern Pacific. This route runs by rail from San Francisco to Galveston and by water from Galveston to New York. Moreover, New York had water carriers from coast to coast.

4. *Zone system of the Commission.*—A compromise was made by blanketing the entire territory east of the Missouri River; that is, giving to this whole territory (and, on much traffic, to points as far west as Denver) the same rail rates to and from the Pacific coast. The transcontinentals then proceeded to go even further than this. They introduced a system that graded east-bound and west-bound transcontinental *class* rates by zones in the territory east of the Missouri River. For example, Omaha had lower *class* rates than Chicago, Chicago than Cleveland, Cleveland than New York. Some east-bound *commodity* rates also were generally graded by zones, while west-bound commodity rates remained blanketed for the whole territory east of the Missouri River. This zoning tendency, of course, aided the Middle

West in its competition for the coast business, a tendency that was accentuated by the superior rail service that could be afforded from the middle western producer to the coast.[1] The only relief which the railroads afforded the East was given to New York City, and to it alone, by the Southern Pacific and by the Santa Fe's route to New York in connection with the Mallory Line between New York and Galveston. These routes gave to their New York piers the same east-bound transcontinental commodity rates as were accorded to "group D" points (Chicago and vicinity). All this time the rates to intermountain points both from the East and the Middle West were the rates to the coast plus the back haul.

The intermountain cities under such a rate adjustment, could not, in competition with Pacific coast cities, control the distribution of eastern merchandise even in adjacent intermountain territory. In March, 1918, a representative of the Idaho State Railroad Commission thus described the plight of an intermountain city, in hearings on "long-and-short-haul on railroads" before the House Committee on Interstate and Foreign Commerce:

> Portland, Oregon, could buy in exactly the same market as the man in Boise, ship his goods to Portland for $2 and back to Boise for $1.50, which was exactly the same figure as the man in Boise had to pay, the carriers performing over 1,000 miles greater service for the Coast than for the interior cities. When Boise attempted to distribute to the West she was in a

[1] It must be remembered, however, that most of the westbound (competitive) traffic moved on blanketed commodity rates.

very much worse position. She had to pay the local rate to the point west, plus $3.50 inbound charge, while the coast paid $2 inbound, plus a less than $1.50 outbound charge, depending on the scale of rates from Portland, which, of course, diminished as the distance from Portland lessened. Even when commodities were distributed from Boise to points east from Boise she was at a disadvantage, the distributing rate from Boise being higher than the additional haul rate from Portland. Illustrating: The inbound rate to Boise, $3.50 plus, say, 43 cents to Mountain Home, a point 75 miles east of Boise, or $3.93, against $2.00 to the Coast, plus, say $1.60, from Portland to Mountain Home, or $3.60. That is 33 cents in favor of Portland.

The following table shows the transcontinental rate situation in the summer of 1914, just before the opening of the Panama Canal. This table shows certain transcontinental commodity rates applying to Chicago and other group D points lower than to New England, which is in group A, extending as far west as Buffalo. It shows the Southern Pacific and Mallory Lines giving New York City the rates of group D. It shows west-bound commodity rates, identical for all eastern territory. It shows the American-Hawaiian with markedly lower rates than the rail rates, both east and west-bound.

It should be kept in mind that the American-Hawaiian rates were merely the rates published for New York local traffic. For thru business of the eastern interior they were subject to reduction as the water carrier saw fit, so that, in combination with local rates from eastern points to the seaboard, a thru charge, rail-and-water, could be produced low enough

COMPARISON OF ALL-RAIL AND ALL-WATER TRANSCONTINENTAL RATES. CARLOADS. CENTS PER 100 LBS.[1]

East-Bound	*All-Rail Rates Applying* To New England Points[2]	*All-Rail Rates Applying* To Chicago and other group D points (also the New York piers of Southern Pacific and Mallory Lines)	*All-Water Rates Applying* Via American-Hawaiian To New York Piers
Asphalt	60	50	30
Wool	100	100	45
Canned salmon	70	70	45
Other canned goods	85	85	45
Shingles (Seattle)	85	85	55

West-Bound	*All-Rail Rates Applying* From New England Points	*All-Rail Rates Applying* From Chicago and other group D points (also the New York piers of Morgan[3] and Mallory Lines)	*All-Water Rates Applying* From New York Piers
Boots and shoes	2.75	2.75	1.50
Cotton duck, denims, drills, sheetings, and bagging	1.00	1.00	.70
Wrapping paper	.90	.90	.75
Canned goods	.90	.90	.60
Shoe blacking	1.10	1.10	.75

[1] From E. J. Clapp, "The Port of Boston," Yale University Press, 1916.

[2] These rates applied to all Atlantic Seaboard territory (territory east of Buffalo and Pittsburgh) except in regard to the New York deliveries specified in the next column.

[3] Morgan Line is the name of the Southern Pacific's Atlantic steamship services.

to take interior traffic away from the transcontinentals.

5. Complications caused by the intermountain situ-

ation.—The later course of competition between the Panama Canal and the rail carriers is affected and somewhat complicated by the fact that in 1914 the intermountain points were brought into the general scheme. At that time rates to these points were tied up to the rates to the coast in such a manner that the latter could no longer be lowered to meet the exigencies of water competition without affecting the rates of the intermountain region. The intermountain rates had to sink along with the coast rates.

The railroads were faced with a considerable reduction in the water rates immediately after the opening of the Panama Canal, in the Fall of 1914. The American-Hawaiian was saved the transshipment costs incident to the Tehuantepec route, and with other water carriers enjoyed an unobstructed sail from New York to San Francisco. Reduction in water rates resulted. In meeting the reduction, the transcontinentals found themselves hampered by the intermountain situation, mentioned above. It may be briefly described as follows:

The 1910 Amendment to Section 4 of the Interstate Commerce Act gave the Commission new power over violations of the long-and-short-haul rule, such as the violations from which Spokane and Reno suffered. That is, the amendment forced the carriers to make application for permission to continue each violation of the long-and-short-haul principle. They applied for permission to continue the transcontinental rate adjustment. Reno and other intermoun-

tain cities protested. In the Reno case of 1910 (19 I. C. C. 238) Commissioner Lane thus graphically described the situation:

> The highest main-line rates to be found in the United States are those from eastern points to stations in Nevada. For carrying a carload of first-class traffic containing 20,000 pounds from Omaha to Reno, the Union-Pacific-Southern-Pacific line charges $858.00. If a like carload is carried 154 miles further, to Sacramento,[1] the charge is but $600.00. The first class rate to the more distant point, Sacramento, is $3.00 per 100 pounds, and to the nearer point, Reno, $4.29 per 100 pounds. If a like carload of freight originates at Denver, 500 miles west of Omaha, the same rates to Reno and Sacramento apply (as from Omaha); and if the freight originated at Boston, 1,700 miles east of Omaha, the rates are the same (as from Omaha).

Now, the Interstate Commerce Commission could see how the exigencies of water competition might make it necessary for the rail carriers from Boston to give San Francisco a lower rate than they could afford to give Reno. But the Commission could not see how Omaha or Denver could set up a plea of water competition that justified it in granting lower rates from those points to San Francisco than to Reno. The justification for pleading water competition seemed to the Commission to increase as points nearer the Atlantic seaboard were considered.

6. *Commission's decision on intermountain situation.*—Therefore, in 1911, after certain minor preliminary orders and certain investigations, the Commission

[1] Classed as a coast terminal and granted the same rate as San Francisco.

prescribed a totally new rate basis for the intermountain territory. The country east of the Missouri was divided into five zones. Number I comprised all territory west of and including Duluth, St. Paul, Omaha and a line south from Omaha to the gulf. Zone Number II included Chicago and other central points. Number III (including Buffalo and Pittsburgh) was east of II, north of the Ohio and west of the Buffalo-Pittsburgh line. Number IV comprised the territory east of III and north of the Potomac; while V lay south of the Ohio and Potomac and east of the Mississippi. The Commission ruled that rates to the intermountain region could exceed the corresponding rates to the coast by no more than the following percentages:

Group I	0%	Group III	15%
Group II	7%	Group IV	25%

Group V not prescribed [1]

That is, if there were a blanket commodity rate to Pacific coast terminals of $1.00 per 100 pounds, applying from all points on or east of the Missouri River, the corresponding rates to Reno and Spokane could not exceed the following amounts:

Group I	(St. Paul, Omaha)	$1.00
Group II	(Chicago, St. Louis)	$1.07
Group III	(Cleveland, Buffalo)	$1.15
Group IV	(New York, Boston)	$1.25

[1] On June 21, 1918, the Director General ordered thru rates between western points and Group V, on a basis corresponding with the rates north of the Ohio. Previous to this action, rates of Group V were formed by adding proportionals to the Mississippi River, and hence were higher than points north of the Ohio.

7. *Effect of Commission's decision.*—It is obvious that this would tend to throw the business of manufacturing for the intermountain region from the East to the Middle West. Such a result, considering the Middle West's advantage in distance, cannot be objected to. Indeed, the Hill roads had already gone a considerable length in giving St. Paul and Chicago advantages over the East in the trade of Spokane. Above all, the proposed rates would allow the intermountain cities to begin to grow up as jobbing centers, and enable them, at least so far as middle western supplies were concerned, to control for the first time distribution in their own territories, in competition with the coast cities.

The Commerce Court in 1911 enjoined this order of the Interstate Commerce Commission on the ground that the Commission had no right to determine relationships of rates in this manner. The case went to the Supreme Court on appeal and in 1914 was decided in favor of the Commission; the Commerce Court was reversed. So in 1914 this rate relief for the intermountain cities was put in effect; it was a great improvement over the old system, which had made these points pay the Pacific coast rate plus the back haul.

In the meantime, in 1913, the carriers, expecting the Supreme Court to support the Commission, began an adjustment of their commodity rates west, to anticipate the Court's decision. They proposed to level many of these rates upward. That is, they pre-

pared to publish, from all eastern territories clear thru to the coast, rates as high as those applying to Reno and Spokane, on all goods moving on class rates and on all commodities which, as a practical matter, were not subject to water competition, e.g., articles unsuited for water carriage, like glass or gummed paper. These commodities came to be grouped as Schedule A commodities.

8. *Progress in rate-making since the opening of the Panama Canal.*—As we have seen, in September, 1914, the Panama Canal was opened. The American-Hawaiian, W. R. Grace and Company and the Luckenbach Steamship Company all operated lines from the Atlantic to the Pacific seaboard. These routes lowered water rates. The resulting competition made the rail carriers realize that unless something were done, a very heavy traffic from the East would leave their rails, and their clients in the Middle West would be heavily handicapped in attempting to supply the Pacific coast in competition with eastern seaboard shippers using the water lines. But if they dropped their transcontinental commodity rates to the coast, rates to intermountain points also must go down in accordance with the Intermountain Zone Order, and a large loss of revenue would be incurred.

Late in 1914, therefore, the railroads asked for permission to meet this water competition by commodity rates to Pacific coast terminals without corresponding reductions to intermountain points. A list of 110 commodities was submitted (Schedule C), on which

relief was asked. It is said that 80 per cent of the volume of traffic to the West consisted of articles in Schedule C. Commodity rates to the West on a large number of other commodities, about 300 in all, were filed in November, 1914, the rates being in accord with the Commission's zone order, as upheld by the Supreme Court. These 400 were Schedule B commodities.

The Commission's investigation of the demand for relief for the Schedule C articles disclosed an interesting situation. In 1912 the tonnage moving from Atlantic to Pacific by water was 451,582; in 1913 it was 434,115 tons. In the month of September, 1914, the first month the canal was opened, this tonnage jumped to 77,915 tons, more than double the monthly average of the preceding year. The railroads' claim that the canal had brought them a competition undreamed of before was substantiated. So on April 30, 1915, the Commission granted them the relief desired for the 110 commodities in Schedule C (32 I. C. C. 611). The roads were allowed to make westbound rates on these commodities as low as they chose. The only provision was that where the Schedule C rate was less than 75 cents, the corresponding carload rates from the Missouri River to intermediate points could not exceed 75 cents per 100 pounds, and from zones II, III and IV could not exceed 90 cents, $1.00 and $1.10 respectively. Where the Schedule C rate was over 75 cents, that rate should apply as a maximum to the intermediate country from the Missouri

River with the indicated differentials applying to zones II–IV. Moreover the Schedule C rates might be applied only to deep-sea Pacific ports, not to the list of 263 "terminal cities" in California.

In additional orders, further relief was granted regarding rates on iron and steel from Pittsburgh [1] and other centers, and on California products via Galveston to the Atlantic seaboard (Southern Pacific and Mallory Lines). Under this latter authorization the Southern Pacific and Santa Fe-Mallory routes gave rates of 40 cents per 100 pounds on 80,000-pound carloads of canned fruit, canned salmon, barley, beans and asphalt from California to New York, 60 cents per 100 pounds on dried fruits, 45 cents per 100 pounds on wine—and at the same time maintained higher east-bound rates from intermediate western points.

The leading articles of traffic to the Pacific coast

[1] The new rate from Pittsburgh to the coast was 65 cents. It is interesting to note the manner in which that rate was arrived at. The American Hawaiian Line had a water rate of 40 cents from New York to the Pacific coast. The railroads figured that they could not afford to meet that rate from New York. However, they decided to compete for the business of Pittsburgh and points west. The rail rate from Pittsburgh to New York was, in round figures, 17 cents. Adding that 17 cents to 40 cents, the Pittsburgh steel interests could get their product west, via New York, for 57 cents. The Interstate Commerce Commission allowed the railroads to put in a rate of not lower than 65 cents from Pittsburgh, figuring that this higher rate was the "equivalent" of the 57 cent rail-and-water rate, because the rail rate assured quicker movement, no re-handling, and delivery at the consignee's siding in San Francisco, instead of at a steamship dock. Then the representatives of the producers in the Chicago territory prevailed upon the Interstate Commerce Commission to say that the Chicago rate should be 55 cents, 10 cents under the Pittsburgh rate.

had now become classified into three groups. Schedule A articles, 100 in number, could not carry lower rates from any eastern territory to the Pacific coast than to intermediate points. Schedule B articles, 306 items, could carry lower rates by the percentages of the Commission's zone order. On the 90 carload (and many L. C. L.) items of Schedule C, the carriers could go as low as they chose in rates to the coast, observing in rates to intermediate points the maxima enumerated above.

On April 30, 1915, the Interstate Commerce Commission entered an order authorizing carriers to construct rates from the East to points inland from the Pacific coast by adding to the terminal rate not more than 75 per cent of the local rate from the nearest terminal to destination, tho the aggregate was not to exceed the maximum which the zone order prescribed for the intermediate (intermountain) points. For Schedule C commodities, this maximum was 15, 25 or 35 cents higher to the interior than to the coast from Chicago, Pittsburgh and New York territories respectively.

9. *Slides on Canal complicate rate situation.*— Slides occurred in the Panama Canal which closed it to traffic from September, 1915, to April, 1916. While the canal was closed, the steamship companies which had operated thru it from coast to coast did not continue their service via Cape Horn. Instead, they gave up the service entirely. Because of the world war, the demand for tonnage in the for-

eign trade was very great. The American-Hawaiian and other companies could charter their vessels at prices that gave them larger profits than they could earn by operating in the American coast trade at rates which were limited by the transcontinental rail rates.[1] The transcontinental rail rates were now holding the water rates down, whereas in the past the water rates had forced the rail rates down.

When the Canal was reopened without traffic in April, 1916, the intermountain cities demanded that Pacific coast terminals be no longer allowed to enjoy commodity rates (Schedule C) which were further below those applicable to intermountain points than were allowed by the first zone order of the Interstate Commerce Commission. The intermountain interests maintained that the severe competition of the Panama Canal water route, which the railroads had cited as justifying exceptionally low commodity rates to Pacific terminal points, no longer existed.

The contention of the intermountain points was entirely sound and the coast cities were hard put to it for defense. The best that they could do was to fall back upon an amendment to Section 4 of the Interstate Commerce Act, made in 1910. This amendment provided that if a railroad chose to meet water competition with low rates, it could not later

[1] It is interesting to note that the American-Hawaiian Line finds it profitable to keep its ships off the coastwise route in spite of the fact that it has long-term contracts for the carriage of goods (e. g. sugar) from coast to coast. It orders those goods transported by rail and stands the loss which this transportation imposes.

withdraw those low rates simply because the water competition was eliminated. The Interstate Commerce Commission pointed out that this provision looked toward another sort of elimination of water competition than had occurred: namely, elimination because of competition of the railroad. It therefore took the viewpoint of the intermountain cities, and indicated that the Schedule C commodity rate structure, as applying to Pacific coast and intermountain points respectively, should be adjusted in accordance with its original zone order, then being applied only to Schedule B articles. Schedule C rates to the coast were canceled by the carriers, effective September 1, 1916, but the cancelation was suspended by the Commission, pending investigation, until December 30, 1916. In the meantime the railroads had been allowed by the Commission to increase their C. L. Schedule C rates to the coast by 10 cents per 100 pounds, their L. C. L. Schedule C rates by 25 cents per 100 pounds and their low rates on California products east-bound by 10 cents per 100 pounds.

10. *Spokane protests.*—While the Schedule C increases were being considered, the Merchants' Association of Spokane, on September 9, 1916, started more trouble by filing a petition averring that in consequence of entire disappearance of water competition between the Atlantic and Pacific coasts of the United States, there remained no justification whatever for the maintenance of a rate on *any* commodity from eastern territory to Pacific coast ports lower than

rates to intermediate points. That is, Spokane petitioned to have even the Commission's zone order revoked, and all rates to the West maintained in strict accord with the long-and-short-haul clause. On June 30, 1917, in 46 I. C. C. 230, the Commission granted the petition of Spokane. The Commission found that water competition was then a negligible factor in affecting the rates by rail between Atlantic and Pacific coast terminals. It held that rates on all commodities between eastern territory and the Pacific coast could no longer lawfully be lower than those to intermediate western territory. Therefore the carriers had to raise their rates to the coast or lower their rates to the intermountain points to effect the required adjustment. The Commission indicated which of the Schedule C rates to Pacific coast terminals could be considered unreasonably low. The railroads prepared to meet the Commission's order to observe the long-and-short-haul clause—prepared to meet it by raising the rate to the Pacific coast in the case of those commodities specified by the I. C. C., and to lower the rates from the East to intermountain territory in the case of certain other commodities.

The Commission had also ordered the long-and-short-haul clause observed in the case of California products moving to the Atlantic seaboard on rates already described. The railroads likewise got ready to file tariffs complying with this point of the Commission's order.

In general, the carriers proposed, as to carload

commodities, to project the existing rates from the Missouri River to the intermountain cities as minimum rates from the Missouri River to the Pacific coast terminals, and to establish rates from eastern points of origin by the addition of arbitraries over the rates proposed from the Missouri River. The transcontinental lines also proposed to cancel all less-than-carload commodity rates, substituting for them the regular class rates. There were 117 L. C. L. articles in the Schedule B list moving on commodity rates, and a number on the Schedule C list. The L. C. L. commodity rates, on the average, were 80 per cent of the class rates that would have applied on these articles, and they aided the eastern jobbers in competing for the business of retail merchants in the Far West.

Before these rate increases could go into effect in August, 1917, the I. C. C. Act was amended (fifteenth section) so that carriers had to get the Commission's permission even to file higher tariffs. Upon the request of the shippers both in New York and in the Far West, the Commission prevented the filing of these new transcontinental rates, pending investigation. It is significant of the general acquiescence in the proposed rate readjustment—it is significant that the Merchants' Association of New York found itself justified in protesting against nothing but the proposed total abolition of the L. C. L. commodity rates, with a resultant wide spread between the cost of getting carload lots and less-than-carload lots of com-

modities into western territory and the consequent crippling of New York with respect to the jobbing trade of the Far West. On January 21, 1918, the Commission, in 48 I. C. C. 79, allowed the new transcontinental tariffs, with certain modifications, to be filed and to become effective March 15. Since then there have been no class or commodity rates to the Pacific coast lower than to intermountain territory.

11. *Attempted amendments of long-and-short-haul clause.*—In the first half of 1918, the intermountain interests introduced into Congress a number of bills all aiming at an amendment of the long-and-short-haul clause of the Interstate Commerce Act. The bills would have taken away from the Interstate Commerce Commission the power of granting exemptions to the application of the long-and-short-haul clause.

The reason for this agitation of the intermountain people is an interesting one. They feared that, when peace came and vessels returned to the coast-to-coast trade, the old rate structure would again be allowed by the Interstate Commerce Commission. Indeed the Commission, in its decision of January 21, 1918, indicated that that might occur:

> When water competition again becomes sufficiently controlling, in the judgment of the carrier, to necessitate a reduction of the rates to the Coast cities to a lower level than can reasonably be applied at intermediate points, the carriers may bring the matter to our attention for such reasons as circumstances may justify. Competent proof must be submitted in connection with such applications of a fairly

regular water service between the two coasts, as well as the adaptability of the traffic to water competition, the principal points of origin of the traffic, the range of rates afforded by the water line, the principal points of consumption, and the ports upon the two seaboards at which the water carriers receive and deliver the freight.

The intermountain cities insisted that, with such a renewal of the old rate discrimination in favor of coast cities hanging over their heads, it was not possible for them to get local or eastern capital interested in the development of intermountain industries and commercial enterprises. They insisted that they wanted to have some certainty to build upon. The principal legislative measure proposed was the Pomerene Bill, introduced in the Senate.

12. *Pomerene Bill meets opposition.*—Against the Pomerene Bill appeared representatives of the Pacific coast, the transcontinental railroads themselves, and the leading shipping organizations of the country. The transcontinental railroads insisted that if they were compelled to apply to intermediate points the low rates necessary to compete with the boat lines, they would be bankrupt. They pointed out that it paid them to take any rate which more than covered their out-of-pocket expenses, if that rate was necessary to take the traffic away from the boat lines. They pointed out that San Francisco and coast cities, in normal times, would get lower rates than the intermountain cities even if they did not get

those rates by rail, since they could get their goods by sea. They explained that it was to the advantage even of the intermountain cities to have the carriers earn on this competitive traffic anything above actual operating expenses, that is, anything to apply to the meeting of fixed charges which otherwise would have to be borne entirely by other traffic. The transcontinental carriers pointed out that the east-bound tonnage of the Pacific coast exceeds the west-bound 2 to 1. To deprive the carriers of a chance to fill this westbound tonnage would be an injustice and an economic waste.

The freedom which the carriers feel they must have in meeting market competition by low long distance rates was strikingly illustrated by Mr. Winchell, Director of Traffic of the Union Pacific Railroad, in the Senate hearings on this long-and-short-haul bill. He said:

> About the time the European war began to distress the situation, about the time that so many ships were to be withdrawn to go into other services, it was a very vital question whether any rate which the transcontinental carriers could make from Pittsburgh or Chicago to Pacific Coast ports on tin plate, would save that industry to the American producer, as against the Welsh tin plate, which is manufactured at a very much lower cost and on which, during normal times, the transportation costs by water from Cardiff and other Welsh ports to San Francisco were so low that in spite of our American protective tariffs the very possibility of shipping American tin plate to San Francisco and Seattle was threatened. I think very likely both the manufacturer and the railroad would have been compelled to retire from that traffic had not the war intervened.

The contention of shippers thruout the country was that they did not want to see the end of the operation of water routes in regulating rail rates. Moreover, they pointed out that a rigid enforcement of the long-and-short-haul clause would prevent roundabout routes from meeting the thru rates made by a short route—the roundabout routes could not afford to give such low rates to all intermediate points. Thereby the shippers would be confined to the use of a single route instead of having a choice. Chicago and other middle-western manufacturing centers insisted that the East, favored by water carriers, would supply the Pacific coast with goods if the transcontinentals were hampered in giving low rates to the coast from Chicago, to meet eastern competition.

The intermountain cities insist that their amendment to the Interstate Commerce Act is necessary if water transportation in this country is to be revived. They say that water lines cannot exist in competition with rail carriers which are permitted to reduce their rates between points served by the water lines and recoup their losses on traffic elsewhere.

It is interesting to speculate whether the government, even if it retained the railroads of the country, would maintain a different transcontinental rate structure in normal times than the one which obtained before the war. That is, would not the Government itself, owning its own lines, meet water competition between the coasts with coast-to-coast rail rates lower than those to intermediate far-western points?

If the water service from coast to coast is operated by private carriers, will the Government forego the large revenues which it can get for its rail lines by meeting the water rates of private carriers? The result of such self-sacrifice by the Government rail lines would be to throw the burden of a railroad treasury deficit upon the taxpayers. Suppose, on the other hand, the Government itself operates a portion of its new merchant marine from coast to coast. Private carriers will not dare to operate in competition. The Government will then have a monopoly of transcontinental transportation and can move freight either by rail or by water, or by both. Its transcontinental rail lines cannot be used for anything excepting railroad traffic. Its boats can be used in the development of our export trade. Will not the rail lines be used to the utmost capacity before taking boats out of the foreign trade? If transcontinental traffic is to move *both* by rail and boat, even if both are operated by the Government, rates must be nearly identical. That is, the rail rates to the coast would have to meet the water rates.

13. *Rates and the war.*—The whole transcontinental rate has been broken down by the war in driving off coast-to-coast water carriers doing business thru the Panama Canal. In connection with this desertion of the Panama Canal route by the independent steamship lines which operated on it, it is instructive to recall that in 1912 the railroads were

by law forbidden to run boat lines thru the Panama Canal. If they had not been so forbidden, it is likely that the Southern Pacific, and probably the Santa Fe and the Hill Lines would all have established lines thru the Canal to the Atlantic seaboard. These lines would, of course, be operating today. As regards both service and rates, they would be under the jurisdiction of the Interstate Commerce Commission. The Interstate Commerce Commission could order any differential which it saw fit, to apply to the water services of these lines, as compared with their all-rail transcontinental service. What the shippers want from water competition is the lower rates which the lower cost of transportation by water justifies. Since the Interstate Commerce Commission controls the rates of boat lines, it is not a matter of great importance whether they are owned by railroads or by private individuals. Indeed, railroads would be likely to give traffic to their own boat lines more readily than to independent boat lines. The lines owned by the railroads would therefore keep their boats fuller and operate more cheaply than could the independent lines. On this well warranted assumption, the Commission could order lower rates to apply by the railroad boat lines than it could expect to have brought about by voluntary action of the independent lines. The question of railroad-owned water carriers in this country is an important one and will be discussed later in the present volume.

REVIEW

Why are rates from New York to San Francisco lower than rates from New York to Reno?

What modification of this system was introduced by the Interstate Commerce Commission, in the intermountain cases?

Explain the modification in the transcontinental rate structure which the railroads asked for as a result of competition thru the Panama Canal.

Describe the effect of the war on water service thru the Panama Canal.

Why did the intermountain interests try to amend the long-and-short-haul clause of the Interstate Commerce Act?

What was the basis of the opposition to the Pomerene Bill?

CHAPTER IX

EXPORT AND IMPORT RATES

1. *Basis for lower export rail rates.*—The principle has long since been established that export and import rates to and from seaports may differ from the corresponding rates applying on domestic traffic. The present ruling of the Interstate Commerce Commission, Conference Ruling 229, dated December 17, 1910, reads:

> The fourth section of the amended Act forbids carriers subject thereto, without authority from the Commission in accordance with said section, to charge more for the transportation of a like kind of export or import traffic for a shorter than for a longer haul over the same line in the same direction; that is, as we understand the law, the validity of a rate under this section is determined by comparison of an export rate with an export rate, or an import rate with an import rate.
>
> So far as the fourth section is concerned, carriers are not required in the first instance to establish export and import rates which shall be measured and limited by domestic interstate rates between the same points of origin and destination in the United States.

The Commission came to this view as a result of a certain decision of the Supreme Court. To be sure, the Commission had early ruled that this was the case with regard to *export* rates (see the complaint of Bos-

ton, mentioned in Chapter VII, page 125). But with regard to import rates the Commission had tried to prescribe the corresponding domestic rates as a minimum, and had been reversed by the Supreme Court.

In 1891 (4 I. C. C. 447) a complaint was made that the Texas and Pacific Railway and the Southern Pacific Railway, forming a thru route from New Orleans to San Francisco, were accepting, as the rail proportion on traffic moving from Liverpool to San Francisco, rates considerably less than the corresponding domestic rates from New Orleans to San Francisco. The Interstate Commerce Commission forbade these lower import rates, and its decision was upheld by the United States District Court. The case was appealed to the Supreme Court, which reversed the Commission. The Supreme Court held that the Commission had not taken certain factors sufficiently into account. The acceptance of import traffic at low rates enabled the carriers to fill cars which otherwise would have to run back from New Orleans empty, since the preponderance of movement was east-bound. Moreover, competition existed for this import traffic which did not apply to the domestic traffic. The Liverpool business for San Francisco, imported via New Orleans, might move by water direct from Liverpool to San Francisco or it might move across the continent, transshipped at the north Atlantic ports.

2. *Effect of low import rates.*—Any one can see that the railroads might make sacrifices in the matter

of low rates, in order to extend export trade. The consumer at the American seaport may properly be asked to pay a slightly higher rate on domestic goods than the export rail rate if this will help the inland producer reach foreign markets which are subject to foreign competition and from which the inland producer would otherwise be cut off.

It is more difficult to see why import rates should be lower than the corresponding domestic rates. Import rates made lower than domestic rates tend to neutralize the protection given to American manufacturers in our customs tariff. The amount by which the rail rate from New York to Chicago on import goods is lower than the rate on corresponding goods manufactured in New York is, in effect, a rebate given the foreign manufacturer and by so much helps him compete in the American market. There is no doubt that this situation has, in the past, existed in the United States. About 1905, conditions were brought to light which showed that the cost of getting plate glass from Hamburg to Chicago, including both the ocean and rail rates, was less than the rail rate from Pittsburgh. Great pressure was brought to bear upon the railroads to remove discriminating import rates of this sort. As a result of this pressure, import rates into the country, from the ports on the Atlantic seaboard, were generally made the same as the domestic rates, except for raw materials, such as jute, china clay, herring in barrels, grain, hides and other articles which were not produced at the

seaports locally. From New Orleans to the Middle West, there was a complete set of import class and commodity rates lower than the domestic rates from New Orleans. But New Orleans had few manufacturers and the lower import rates served merely to build up the port of New Orleans and not injure its industry.

While in normal times the seaport manufacturers urge that domestic rates be made as low as import rates, the distributors in the interior are eager to have lower import rates. They say that there is discrimination in favor of the distributor at the seaboard if they, in the interior, are not allowed to get goods from abroad at a thru rate which is less than the sum of the local ocean rates to the seaport, plus the full domestic rate inland.

In Mr. McAdoo's general order 28 all export and import rates were declared abolished and the corresponding domestic rates ordered in their stead. During the war there was no need of low rail rates to stimulate exports. We were exporting all the goods which we could find ships to carry. But later, when conditions return to normal, we shall probably again have export and import rates along the lines that existed before the war. Partly for that reason the history and status of the export and import rate structure is here described. A knowledge of it is also necessary to understand the domestic rate structure between the Middle West and the Atlantic Seaboard, for this rate structure, the most important in the coun-

try, was largely borrowed from the export and import rates.

3. *Origin of export rate structure.*—The best understanding of the export and import rates is gained by an account of the origin and present status of the rate structure on the exports and imports of the Middle West, originally applying to the ports Boston to Baltimore inclusive, and later extended to include the rates of Montreal, the Virginia ports, New Orleans and Galveston.

The American trunk lines were built to reach the grain fields of the West. The market for the grain, grain products and provisions of the West was not in the still thinly populated East, but in Europe. The export traffic was therefore the principal traffic of the early railroads. Even as late as 1881 the export tonnage in grain alone was 73 per cent of the total eastbound tonnage which the American trunk lines carried to Baltimore, Philadelphia, New York and Boston. Originally each of the trunk lines reached only one port. The Baltimore and Ohio reached Baltimore only. The Pennsylvania reached Philadelphia only. The Erie and the New York Central reached New York only. If grain and flour could not be exported via Baltimore, the Baltimore and Ohio could not haul them. If they could not be exported via Philadelphia, the Pennsylvania could not haul them. Therefore, the various rail lines waged continual rate wars for the hauling of this controlling export traffic to their respective ports.

4. *Rate war of 1880.*—In 1877, the competing railroads were able to patch up their differences and agree upon a set of rates which gave a certain advantage to Baltimore and Philadelphia. But each community felt that this rate adjustment was unfair to its shippers and distributors. In 1880 New York City merchants brought such pressure to bear upon the New York Central that it withdrew from the agreement of 1877 and the most disastrous of all rate wars, lasting a year, ensued. The arbitration of the railroads' differences and the fixing of relative rates as between the ports, was intrusted to an arbitration commission consisting of Senator Thurman, ex-Senator Washburn and Judge Cooley. The railroads expected that the ports would accept the decision of so eminent a body, and their expectation was realized.

This arbitration commission rendered its decision in 1882. The decision was accepted and has been, with modifications, the basis of relative rates ever since. Baltimore was given 3 cents per hundred pounds and Philadelphia 2 cents per hundred pounds under New York, on all export traffic. Boston was to continue its practice of carrying the same export rates as New York.[1] No decision was passed upon the relative import rates, applying to Boston and New York. The import traffic in those days was negligi-

[1] Boston still has the same export rates as New York. Mr. McAdoo's general order 28 abolished export rates and compelled export traffic to move on domestic rates. However, in order to keep Boston exporters in business, Boston was allowed to move exports on the New York domestic rates, from 7 to 9 cents below those of Boston.

ble. On imports, Baltimore and Philadelphia were to be allowed the following amounts under New York:

CENTS PER 100 POUNDS

	Classes						
	1	2	3	4	5	6	Commodities
Baltimore	8	8	3	3	3	3	3
Philadelphia	6	6	2	2	2	2	2

It will be noted that the export and import differentials are those which apply today on the east-bound and west-bound domestic traffic, respectively, of Baltimore, Philadelphia and New York. When domestic business became of importance, the export and import differentials were applied to it.

5. *Result of rate war in 1880.*—It was declared by the arbitration commission that lower rates to Philadelphia and Baltimore were justified on the cost and distance principle; that is, they were nearer to the West and it cost less to transport freight between these more southern ports and the interior. But the leading justification was the principle of competition. The arbitration commission said that thru rates from Chicago to Liverpool, for example, could not be higher via Baltimore and Philadelphia than via New York and Boston; otherwise, no traffic would move via the more southern ports. It was found that the average ocean rates from Philadelphia and Baltimore were 2 cents and 3 cents per hundred pounds, respectively, higher than from Boston and New York. That justified a lower inland rate of 3 cents to Balti-

more and 2 cents to Philadelphia, to make the thru rate the same. Baltimore and Philadelphia at that time had natural approaches from the sea of considerable less depth than those of New York and Boston; in 1882 these natural differences had not been so nearly eliminated by government expenditures on harbors as they are today. Tramp steamers carrying full cargoes handled most of the grain traffic. Because of the limited depth of the approaches to Baltimore, these steamers charged about 3 cents per hundred pounds more for taking a cargo of grain from that port abroad than they charged for taking a cargo from New York or Boston. The tramps for the same reason charged 2 cents per hundred pounds more for taking grain cargoes from Philadelphia than from New York or Boston. The differential inland rate structure, thus based on differential ocean rates, obtained without protest until 1898.

Differential territory, or territory to which the fixed rate differences applied, came to be more exactly defined and to include territory west of a line running west of Buffalo and east of Pittsburgh, Parkersburg, and Wheeling; south of the Great Lakes and a line drawn from Chicago to Dubuque; north of the Ohio River and east of the Mississippi River. As was seen in Chapter VII, differential territory itself was divided into percentage zones. Moreover, the differentials were applied to traffic passing thru this differential territory en route to the Atlantic seaboard. Grain rates from the Northwest to the Atlantic sea-

board were composed of a rate to Chicago, plus the Chicago rate east. Hence, the regular differential from Chicago was applied. Similarly, flour from west of the Mississippi moved on a combination rate composed of a rate to the Mississippi River plus the rate from there east. Cotton from Memphis moved on a combination rate consisting of a rate to an Ohio River crossing, such as Louisville, plus the rate from Louisville to the seaboard.

6. *Effects of new competition among seaports.*— In the meantime, the Interstate Commerce Commission had been created, in 1887. This Commission was charged with protecting the public against unjust rate discriminations between persons, communities or commodities. In the years 1882-98 New Orleans had had its channels deepened and had three railroads centering at its port. These roads were reaching out for the oversea business of the Middle West, which the Atlantic ports had always considered their exclusive territory. The Chesapeake and Ohio Railroad, after building a port at Newport News, demanded and obtained for it a share of western exports. Norfolk and Newport News took the Baltimore rates. Montreal began to make its all-water route to the interior felt and to draw off American as well as Canadian traffic. On American exports, all-rail, Montreal took the Philadelphia rates, 2 cents per hundred pounds lower than New York.

New York, particularly, seemed to feel these new competitors. The Erie Canal route to New York,

which, in conjunction with the Great Lakes, had been cheaper for shippers in the Middle West than all-rail routes to other ports, found in the nineties a rival it could not meet, in the lower rates brought about by the larger engines, larger trains and improved roadbeds of the railroads, combined with the natural advantages of rail transportation. Traffic left the Canal and moved by rail; it was accordingly distributed among all north Atlantic ports instead of being concentrated at New York.

7. *Effect of rate war of 1898.*—Therefore, in 1898 the New York Produce Exchange instituted a complaint against the railroads, before the Interstate Commerce Commission, charging that the differential export rates on grain, grain products and provisions unduly preferred Boston, Philadelphia, Baltimore, Newport News and Norfolk, as shipping ports, to the port of New York. The Boston Chamber of Commerce appeared at the first hearing, but when it was apparent that New York did not seek a lower rate than Boston, Boston withdrew and the contest proceeded between New York, Philadelphia and Baltimore. New York lost and the differentials were reaffirmed. The Commission declared that there was nothing undue in the preference given Baltimore and Philadelphia, and that that preference was based on differences in cost of transportation and the exigencies of competition.

But the text of the decision resulted in an import-

an* modification of the differentials on all-rail grain. The Commission found that the old disadvantage of Philadelphia and Baltimore in the matter of ocean rates on full cargoes of grain had disappeared. The charter rates for the whole "North Atlantic range" of ports were the same. A vessel could be hired to carry a cargo at the same price from New York, Philadelphia or Baltimore. However, the "berth rates" for parcel lots were lower out of New York, via the liners sailing from that port. The Commission stated that the inland differential ought to be abolished in the case of grain shipped in full cargoes, but retained in the case of grain shipped by liners in less-than-cargo lots. It was obviously impossible to distinguish between the two. Half the time the method of ocean carriage was not determined until after the grain reached the seaboard. Often grain originally booked by one sort of ocean carrier would be diverted to another. So the Commission did nothing.

8. *Railroads change differential structure.*—In the following year, 1899, the railroads, of their own initiative, acted upon the Commission's suggestion that the all-rail grain differential was just with respect to only one of the two classes of grain shipments. The railroads assumed that half the export grain was cargo lots and half parcel lots. They therefore cut the export all-rail grain differential in two, so that on grain for export Baltimore was 1½ instead of 3 cents per hundred pounds lower than New York and Bos-

ton; and Philadelphia was 1 cent instead of 2 cents lower. This was the first break in the differential rate structure. The old differentials remained in force on domestic business, and these old differentials have automatically been transferred to the export grain trade, now that it moves on domestic rates.

The second break also came about by voluntary action of the railroads, and applied to iron and steel articles. When the Lackawanna Steel Company was established at Buffalo, the Pittsburgh mills were alarmed; for the Buffalo rate was 50 per cent of the Chicago-New York rate, while the Pittsburgh rate was 60 per cent. The Pittsburgh mills demanded to be put on a parity with the Buffalo steel rate to the seaboard, largely because of the export market at New York. A solution was found by offering Pittsburgh a reduction by one-half of the amount of the differential. That is, on export iron and steel New York and Boston were put 1.5 cents instead of 3 cents above Baltimore; 1 cent instead of 2 cents above Philadelphia; and Philadelphia was put .5 cent instead of 1 cent above Baltimore. This was done by reducing the Pittsburgh export rates to Boston and New York by 1.5 cents per hundred pounds. The same reduction in the differentials was made in the case of export iron and steel articles from the Youngstown and Cleveland districts. From Chicago and Detroit, the only steel centers in competitive territory not already mentioned, the full differentials continued to apply. They also applied on domestic traffic from

all points, and general order 28 restored the old, full differentials to the export steel trade by making it move on domestic rates.

9. *Ex-Lake grain rates.*—The two latest changes in the differential structure came as a result of the 1905 differential case. In the early months of 1904, the ex-Lake [1] grain rates from Buffalo to Philadelphia, New York and Boston, became the subject of a rate war, during which rates became as low as 0.2 cent per bushel. The grain trade of all the seaports was disturbed by the rate fluctuations, and the flour millers saw the export of wheat, rather than flour, being forced by these low grain rates, while the export flour rates were not correspondingly reduced. The result was to throw to foreigners the milling of our exported bread-stuffs. The Merchants' Association of New York, joined by other commercial bodies in that seaport, asked the Commission to fix these ex-Lake grain differentials and to review the whole export differential rate structure. Pending the Interstate Commerce Commission's decision, C. C. McCain, trunk-line commissioner, arbitrated equal ex-Lake rates on grain to all ports.

In the decision of 1882 and the later one of the Commission in 1898, it was stated that the adjustment therein sanctioned might not be equitable forever, and that future conditions might require a modification of them. The 1905 decision states, 11 I. C. C. 73:

[1] "Ex-Lake" rates are applied on grain brought by water to Buffalo and shipped east by rail.

About the only thing which is made reasonably certain by the statistical tables offered in evidence is that Boston has distinctly lost and that Baltimore and Philadelphia, especially the latter, have distinctly gained in exports of flour. We are inclined to think that this differential should be made 2 cents at Baltimore and 1 cent at Philadelphia.

This meant a reduction from the former 3 cents at Baltimore and 2 cents at Philadelphia. The reduced differential was accorded to both New York and Boston, to apply on export traffic only. Today the full differentials apply on export flour, for it moves on domestic rates.

The other change brought about by the 1905 case was the fixing of the ex-Lake differentials. They played no part in the 1882 arbitration. In the 1898 decision these were barely mentioned as being 1 cent per bushel on wheat and corn, 0.5 cent on barley and oats, in favor of Baltimore and Philadelphia as compared with New York and Boston. In 1898, however, the Pennsylvania was taking grain only from Erie, the Baltimore and Ohio only from Fairport, Ohio. Both these Lake ports were of small capacity and the New York lines, monopolizing the heavy Buffalo traffic, were willing to allow the Baltimore and Philadelphia lines any differential they chose to take on grain thru the other Lake ports. But in 1900 the Pennsylvania bought its way into Buffalo. Between then and the 1903 rate war, the Pennsylvania sometimes took a differential to Philadelphia, sometimes not. The Commission, in its 1905 decision,

fixed the ex-Lake differential at 0.3 cent per bushel on all sorts of grain, in favor of Baltimore and Philadelphia, under New York and Boston. By a later modification of this decision, the differential on barley and oats was reduced to 0.2 cent per bushel; wheat, corn and rye remained at 0.3 cent. On domestic grain ex-Lake there are identical rates to New York, Philadelphia and Baltimore, while Boston is higher. General order 28 raised the ex-Lake rate on all grains up to the domestic level and thus abolished the differentials.

Apart from its action in reducing the flour differentials and fixing ex-Lake grain rates for export, the Commission refused to modify the differential structure. In 1904-05, no evidence was offered with regard to import rates and the Commission did not pass upon them. They first came before the Commission in the 1912 differential case.

10. *Progress in differential structure since 1905.*— After 1905 the differential question rested till 1910, at least so far as legal proceedings were concerned. Reopening of the question was precipitated by action of the Boston railroads with regard to import, not export, traffic. During the period 1905-10, heavy imports for the manufacturing Middle West grew rapidly, and included hides, ferromanganese, burlaps, kainite, clay, palm oil, brewer's rice and other commodities. From all leading European ports, ocean rates to all outports,[1] Montreal to Norfolk inclusive,

[1] All ports but New York are called "outports."

were made equal. Therefore the inland rate determined the thru cost, and Boston railroads saw themselves handicapped, in soliciting this business, by higher inland and therefore higher thru rates.

At the same time, the movement of import commodities thru all United States north Atlantic ports was being diminished by the competition of New Orleans and Montreal. These two ports saw that further extension of regular ocean lines, to carry the cotton of the gulf and the grain of Canada, depended upon getting imports for the ships to carry back from abroad. So the railroad lines serving Montreal and New Orleans offered extraordinarily low import rates into middle western territory. Montreal took a 59-cent import scale,[1] all-rail to Chicago, and a Lake-and-rail import scale of 41 cents. The gulf lines made such inroads on western imports that in 1907 a private arbitration commission (Messrs. Todd and Knott) was called upon to fix a set of import differentials, under the New York rates, applying from gulf ports to points in the Middle West reached by the gulf rail lines. This commission arbitrated that, as to Cincinnati, and as to practically all territory west of and including Louisville, Indianapolis and Chicago, the import rates from New Orleans and other gulf ports should be less than the New York rates by the following amounts:

[1] This means: A set of import tariffs of which the rate of first-class goods was 59 cents per 100 pounds. The New York scale was 75 cents per 100 pounds, Philadelphia 69 cents, Baltimore 67 cents. The Boston import rates are described later.

CENTS PER 100 POUNDS

Classes	*1*	*2*	*3*	*4*	*5*	*6*	*Commodities*
Differentials	18	18	12	8	6	6	6

Until general order 28 was issued these differentials still applied on import traffic via the gulf. On export traffic there was no set of fixed differentials. On separate export commodities the gulf roads made such rates as they thought proper and sufficient to get the business. The gulf lines, by tacit agreement, did not reach out for imports and exports of localities *off their lines.* However, in 1917, the gulf lines published a set of export proportionals applying to freight originating all in Central Freight Association territory. These proportionals, added to the local rates of the northern lines to the Ohio River, were low enough to divert central western exports to gulf ports. The trunk lines naturally were not pleased with this rate innovation.

The Gulf lines would have been put out of the export and import business if Mr. McAdoo's general order 28, ordering all export and import traffic to move on domestic rates, had not been modified in their favor, for these ports had a special set of export and import tariffs, designed to meet the competition of the North Atlantic ports, far lower than the domestic rates to and from New Orleans, Galveston, etc. So, shortly after general order 28 was issued, a supplementary order appeared, allowing the Gulf lines to readjust their export and import rates with the idea of retaining the old port relationship with North

Atlantic gateways. However there was not time for such revision prior to June 25, the effective date of the rate advance carried in general order 28, so the Gulf lines were permitted to advance the old export and import rates 25 per cent, with the understanding that a revision in rates would be made so as to line them up to the old port relationship. Interested traffic committees have recently completed this work.

A noteworthy feature of the export rate structure of the gulf ports, in contrast to the differential rates applying to North Atlantic ports has been that export rates were the same to any gulf port, Galveston to Pensacola inclusive.

REVIEW

Why were export and import rates allowed to differ from domestic rates? Do you believe they will now be reestablished and if so, why?

Explain the origin of the port differentials.

Enumerate the modifications in the original port differentials and the reasons therefor.

Explain the differentials on ex-Lake wheat.

What are the factors that led to the import rate war which Boston started in 1909?

CHAPTER X

EXPORT AND IMPORT RATES (*Continued*)

1. *Controversy over Boston import rates.*—In view of the entirely new import rate situation created for Canadian and gulf ports, the Boston roads felt that their import rates were too high. Boston had been carrying, via both standard and differential all-rail lines, on import traffic to Chicago a set of rates that ran from 70 cents per hundred pounds, first class (New York's import scale was 75 cents, first class) down to 2 cents per hundred pounds below New York on commodities. In 1909 Boston dropped to the Baltimore basis, 67 cent scale and 3 cents below New York on commodities. The Boston roads claimed that until 1901 they had carried a 65 cent scale to the West for imports and 3 cents below New York on commodities; Boston likewise carried 70 cents first class, and 2 cents per 100 pounds below New York on commodities, as a differential domestic scale. The trunk lines in 1901 persuaded the Boston roads to advance their import rates to the 70 cent *domestic* scale, commodities 1 cent under New York. The Boston roads, however, reserved (so they say) the right to revert to the 65 cent scale on their imports if their import business languished on the 70 cent scale.

Therefore the Boston standard lines claimed that they were exercising only a part of their rights when, in June, 1909, they published the Baltimore import rates—a 67 cent scale for classes and commodity rates 3 cents under New York. The roads from other ports met this reduction, and Boston reduced rates still further, finally reaching 58 cents, first class. After fruitless conference between the railroad officials of the various lines and between representatives of commercial organizations of various ports, the adjustment of import rates was left to the Interstate Commerce Commission as arbitrator. However, the New York Chamber of Commerce instituted a formal complaint, charging that the lower export and import rates applying to and from Baltimore, Philadelphia and Boston constituted illegal discrimination against New York. Boston intervened in this complaint and asked to be given export rates equal to those of Baltimore, just as it was seeking Baltimore's import rates in the arbitration. In 1911 the Commission heard together the import and export cases and the arbitration. Its decision was rendered in 1912.

In this decision, the *status quo* was ordered maintained all along the line, with respect to both exports and imports, except that Boston's direct (standard) routes to the West lost their 70 cent import scale. As arbitrator, the Commission was asked to decide whether Boston could remain at the Baltimore 67 cent scale or go back to its 70 cent scale. But in deciding the formal complaint, the Commission found

that the Boston standard lines could not legally accept less than the New York import rates to the West, a 75 cent scale first class, and commodity rates 3 cents higher than Baltimore's. One of the Boston standard routes to the West, the New Haven-Pennsylvania route, led thru New York. The Commission claimed that to allow this route to carry lower import rates than applied to the West from New York over the Pennsylvania, would have been an unjustifiable violation of the long-and-short-haul clause of the Act. Boston differential routes were allowed to retain their domestic rates on imports; that is, 70 cent scale, commodities 1 cent under New York.

This situation held until the promulgation of general order 28, except as the absolute rates were modified thru the rate increases which the Commission allowed the railroads to make in 1915 and later. No matter how export and import rates varied, the fixed differentials described in this chapter applied to the ports all the way from Montreal to Galveston, and when the normal state of competition is resumed, this export and import rate structure will no doubt be reestablished.

2. *Typical cases of import differentials.*—The whole set of import rate differentials may be illustrated by the case of two commodities—dry goods, which move first class in carloads or less than carloads; and wood pulp, which moves from the seaboard to the interior on exceedingly low rates.

Up to June 25, 1918, in the case of dry goods, the

Boston differential import rate (85 cents) to Chicago, for example, was 5 cents lower than the Boston standard import rate (90 cents), while the other ports had rates lower than Boston's differential rates by the following amounts:

	Cents per 100 Pounds
Philadelphia and Halifax	1
Baltimore, St. John, Portland	3
New Orleans and Galveston	11
Montreal	13

It will be noted that Halifax was given the same rate as Philadelphia on imports, while St. John and Portland received the Baltimore rate.

With regard to wood pulp, imported, moving to Chicago, the differences were not as great, absolutely, but they were more effective because such a low-class commodity was more sensitive to rate differences. The Boston differential rate was 1 cent below the Boston standard (the New York rate), and the rates from the other outports were lower than the Boston differential rate by the following amounts:

	Cents per 100 Pounds
Philadelphia and Halifax	1
Baltimore, St. John, Portland	2
Montreal	2
New Orleans and Galveston	3

3. *Export rates from the Middle West.*—The situation as it existed with regard to export rates from the competitive territory of the Middle West, to New

York, Boston, Philadelphia and Baltimore, is illustrated by the table given below.

In addition, it should be remembered that Montreal carried Philadelphia export rates, St. John and Portland carried New York export rates, while New Orleans and Galveston had export rates lower than those of Baltimore by differentials varying with different products and different localities.

AMOUNTS BY WHICH PHILADELPHIA AND BALTIMORE EXPORT RATES WERE LOWER THAN THOSE OF NEW YORK AND BOSTON FROM THE WEST.

	Export rates to Phila. lower by	Balto. lower by
Export traffic on class rates	2c per 100 lbs.	3c per 100 lbs.
Grain, all-rail (Also steel)	1c per 100 lbs.	1.5c per 100 lbs.
Wheat, corn, rye, ex-Lake	0.3c per bushel 0.5c per 100 lbs.	0.3c per bushel 0.5c per 100 lbs.
Barley and oats, ex-Lake	0.2c per bushel 0.4c per 100 lbs.	0.2c per bushel 0.4c per 100 lbs.
Flour	1c per 100 lbs.	2c per 100 lbs.
All other traffic on commodity rates	2c per 100 lbs.	3c per 100 lbs.

On the following page are given the pre-war import rates on wood pulp from different ports to various points in the Middle West. The rates are those of 1914, and were later increased before being established by general order 28. The figures are taken from a diagram in Clapp's "The Port of Boston," pages 106, 117 and 119.

4. *Effects of system of differential rates.*—There

IMPORT RATES ON WOOD PULP (CARLOADS) ATLANTIC & GULF PORTS TO INTERIOR
CENTS PER 100 LBS.

Interior Points	Montreal	Halifax	St.John	Portland	Boston, Std.	Boston, Diff.	New York	Philadelphia	Baltimore	New Orleans & Galveston
Columbus Detroit Toledo 78%	13	14	13	13	16	15	16	14	13	
Cincinnati 87%	14	15	14	14	17	16	17	15	14	11
Indianapolis 98%	16	17	16	16	19	18	19	17	16	13
Chicago Louisville Milwaukee 100%	17	18	17	17	20	19	20	18	17	14
St.Paul Minneapolis	28	29	23	35	31	30	31	29	23	25
St.Louis Mississippi River Crossings (for traffic beyond) 117%	20	21	20	20	23	22	23	21	20	17
Council Bluffs Nebraska City Omaha	33	34	33	33	36	35	36	34	33	30
Atchison, Kan. Kansas City, Kan. " " , Mo. Leavenworth, Kan. St.Joseph, Mo.	30	31	30	30	33	32	33	31	30	21
Fremont Lincoln	36	37	36	36	39	38	39	37	36	33
Sioux Falls	37	38	37	37	40	39	40	38	37	34

were several very striking effects of this system of differential rates. With regard to traffic which can move in full cargo lots across the ocean, the differentials act as a subsidy to the shipper to export and import via the differential ports. Obviously, if a man can get his wheat to Baltimore at a rate of 1½ cents per hundred pounds lower than to New York, and if he can get the same charter rates for vessels out of Baltimore as out of New York—as he usually can—he will export his full cargoes of grain via Baltimore until the Baltimore elevators can no longer accommodate him.

The interior shipper does not thus get the advantage of the differential railroad rate in the case of traffic that moves on liners in parcel lots. The flour exporter gets a rail rate to Baltimore 2 cents per hundred pounds lower than to New York or Boston. But he finds that the ocean rate from Baltimore to destination is 2 cents per hundred pounds higher than it would be on a line plying to the same destination from Boston. That is, the steamship lines "take up the slack" in the differentials. In this case, the differentials act as a subsidy to the steamship lines to run their services from differential ports rather than from those which enjoy no differential. In normal times, this situation rather tends to injure Boston as a port, in its competition for the exports of the Middle West, as well as in competition for imports.

New York is less harmed. In general, only New York has steamship connections with non-European

destinations. So the non-European business is tied to New York in any case. In spite of the differential, which may cause bulky traffic to be moved via the outports, New York retains, and always will retain, a large part of the traffic between this country and Europe. Some of this traffic insists upon moving on the fast passenger boats which ply to New York alone. Some of it comes to New York because in New York is concentrated the trading in exports and imports for the whole country. Moreover, there are some European destinations to which New York alone has sailings—for example, Black Sea ports. All business for such ports, even the bulky traffic, must move to New York. New York also has good connection with South America, Africa, Asia and Australia. Besides its thru trade, New York has a large local business which serves her nearby population of 10,000,000, and is unaffected by rates to and from the West.

Each port enjoys an advantage in rates thruout its own local territory. Boston has as local territory most of New England; New York has New York State, northern New Jersey and part of New England; New Orleans and Galveston have the South. Competition for exports and imports applies mainly to the Middle West, whose rate structure, in normal times, has been described. The import rates from New Orleans were fixed by the Todd-Knott arbitration at amounts below the New York rates, varying

from 18 cents to 6 cents per hundred pounds. Those rates were far lower than the high local rates applying in southern territory.

5. *Aid given export trade by railroads.*—Half-informed persons in this country are continually writing to the newspapers to demand that the railroads give preferential rates for the purpose of furthering our export traffic. The railroads did give such preferential rates. For example, export rates to Boston are still made as low as the domestic rates to New York, altho the domestic rate to Boston exceeds the domestic rates to New York by amounts varying from 7 cents to 2 cents per hundred pounds.

Late in 1916 the following were a few examples of rates granted to export traffic lower than the corresponding domestic rates. The railways will again grant such rates when normal conditions of international competition return.

COMPARISON OF CERTAIN EXPORT AND DOMESTIC RATES

				Cents per 100 lbs. Carloads To			
Route	Commodity	From		*Boston*	*N.Y.*	*Phila.*	*Bal.*
All rail	Wheat	Chicago	Domestic	18.8	16.8	14.8	13.8
" "	"	"	Export	13.7	13.7	12.7	12.2
Ex-Lake	"	Buffalo	Domestic	8.4*	6.8*	6.8*	6.8*
"	"	"	Export	6. *	6. *	5.7*	5.7*
Rail & Lake	Flour	Minneapolis	Domestic	25.	23.	21.	20.
" "	"	"	Export	19.5	19.5	18.5	17.5
Rail	Struct'l Steel	Pittsburgh	Domestic	18.9	16.9	15.9	15.4
"	" "	"	Export	11.	11.	10.	9.5
"	" "	Buffalo	Domestic	17.9	16.9	16.9	16.9
"	" "	"	Export	11.	11.	11.	11.

NOTE—* Cents per bushel.

6. *Oriental trade and the Great Northern.*—One of the noteworthy records of what a railroad can do to further export trade is the story of James J. Hill of the Great Northern and his bid for the trade of the Orient.

In 1893, the Great Northern was completed across the Continent. When this railroad reached Puget Sound, it found the largest supplies of standing timber in the world. There was a market for that timber in the Middle West and the East, but a low transportation rate was required to develop the business. Mr. Hill gave the very low rate of 40 cents per hundred pounds from the State of Washington to the Middle West. Before the lumber traffic started, the larger part of his business had been west-bound, and the cars were returning empty east-bound. Mr. Hill not only filled the empty east-bound cars with lumber but developed the traffic so that the east-bound movement was preponderant and cars were running empty to the west.

Mr. Hill had foreseen this contingency and had prepared for it. His plan was to fill those west-bound cars with American exports to the Far East—flour, steel rails, cotton goods. He had had his agents in the Far East examining the markets and making reports to him on the possibilities of developing trade in American manufactures. He built the steamships *Dakota* and *Minnesota,* 28,000 tons each, at that time the largest freight carriers in the world, so that he could put American goods on the markets of China

and Japan at a transportation rate which could not be equalled by any other country.

Not only did Mr. Hill's agents report to him, but he took an intense interest in the matter himself. On one occasion he intercepted a delegation of Japanese who were crossing this country on their way to Europe to buy steel rails. By cooperation with American steel makers, he arranged to deliver their steel rails at a rate so low that the Japanese bought from America. The other transcontinental roads followed his lead, notably the Southern Pacific, which owned the Pacific Mail Steamship Company. Exports from the United States to Japan increased from $7,700,000 in 1896 to $51,700,000 in 1905. Exports to China increased during the same period from $6,900,000 to $53,500,000.

All during this period this large American traffic was moving on thru rail-and-ocean rates which were unpublished. These were open rates which were subject to variation on agreement of an American transcontinental line and a Pacific steamship company, whenever it was desirable or necessary to meet a low ocean rate from Liverpool or Hamburg to China or Japan. The railroads considered that these rates must be "open" so that they themselves would have a free hand in dealing with a constantly changing rate situation. If the rate of yesterday had suddenly to be cut 10 cents per hundred pounds, the American railroad could stand 5 cents of the cut, and the steamship line on the Pacific 5 cents more.

7. *Hepburn Act.*—All this was changed by the Hepburn Act of 1906, which amended the Interstate Commerce Act. The Hepburn Act required that railroads should publish their proportionals of thru rail-and-water rates to foreign destinations. The obligation to publish these export proportionals, with the resulting impossibility of varying them, except upon thirty days' notice to the Interstate Commerce Commission, removed all flexibility from the railroad proportion of the thru rate. This was not altered by a ruling of the Interstate Commerce Commission reducing from thirty days to three days the period of notice that must be given to the Commission before an export proportional could be lowered, and ten days before it could be raised.

8. *Effect of the Hepburn Act.*—After the Hepburn Act was passed, the situation was substantially as follows: A merchant in Hong Kong who had received quotations from German and British companies asked the representative of the American steamship line what rates he could give from Chicago. In case a particularly low rate was required, the American agent could not quote that low rate unless the steamship line was willing to lose the entire difference between the published thru rate and the new rates that were necessary. The steamship line, of course, could not do this alone and the railroad line was forbidden to participate with the freedom necessary to meet changing commercial conditions.

Moreover, the railroads were unwilling to publish

their export proportional rates, for fear that the cities of the Pacific coast would claim that there was too great a discrepancy between the domestic rates and these low export proportionals. The railroads did not want to run the risk of having to drop their domestic rates to the coast in order to protect their export proportionals. The export proportional rates were withdrawn, and henceforth business had to move to the Orient on a combination of the published rates to the coast (domestic rates), plus the ocean rates. The effect upon our foreign trade was immediate and striking. From 1905 to 1907 our exports to Japan dropped from $51,700,000 to $37,800,000 while our exports to China dropped from $53,500,000 to $25,700,000. The railroad campaign for the trade of the East was at an end.

9. *Export and import rates abolished.*—Along with the 25 per cent increase in freight rates, Mr. McAdoo's general order 28 abolished all export and import rates. Export and import traffic was then forced to move on domestic rates, and domestic, not export and import differentials were to apply. It soon became apparent that certain modifications in the harshness of this disturbance of the rate structure were necessary.

For example, a large proportion of our foreign trade with the Far East was moving by rail between the territory east of the Missouri River and the Pacific coast, thence by water to destination. The rail rates on which this traffic moved were far lower than

the domestic rates to and from the Pacific coast. This method of handling our trade with the Far East meant an economy of ship tonnage at a time when such economy was direfully necessary. In a year a ship could make many more voyages between San Francisco and Yokohama than between New York and Yokohama.

10. *Domestic rates substituted for import and export rates.*—The substitution of domestic for export and import rates meant such enormous increases in the cost of doing foreign trade thru the Pacific ports that American importers and exporters were faced with the necessity of giving up that trade or else attempting to carry it on by longer ocean routes from the Atlantic seaboard thru either the Panama or the Suez Canals. In either case, the Federal railroads were going to be hurt, deprived of the earnings they were getting on this class of transcontinental business. Therefore, the Transcontinental Freight Bureau was allowed to issue a tariff carrying special export and import commodity rates applying to the Pacific ports. To be sure, the number is not nearly so large as the number of commodities granted such special rates before general order 28.

11. *Thru bills of lading greatly restricted.*—It was also proposed by the Railroad Administration to cease the issuance of all thru bills of lading, that is, bills providing for both rail and water transportation in the export trade. These thru bills of lading were largely issued by the New York representatives of trans-

continental railroads, in a manner and for a purpose that can be easily illustrated.

A buyer in Japan, when placing an order with an exporter in the United States, would establish a letter of credit with a New York bank. The American exporter, in turn, would buy the desired goods from an American manufacturer, and instruct the latter to ship the goods via a designated route to the Pacific coast for clearance on a certain steamer. After the shipment had gone forward by rail, the American manufacturer would send the initial line railroad receipt to the exporter in New York. He in turn would exchange it for a thru export bill of lading at the office of the interested transcontinental railroad over which the car was moving. The exporter would then present the thru bill of lading, together with invoices, packing lists, insurance policy and draft covering all charges, to the New York bank extending credit to the Japanese buyer. The bank would honor the exporter's draft, closing the transaction so far as he was concerned.

Such established practices were menaced by the threat of the Railroad Administration to stop the issuance of thru bills of lading and to abolish all off-line freight offices (see Chapter XI) including the New York offices of transcontinental carriers. The protests on the part of shippers were so strong that the issuance of thru bills of lading via Pacific ports was continued subject to certain new rules and regulations, and each transcontinental carrier was author-

ized to maintain a representative, for such purposes, in the New York offices of the Trunk Line Association.

REVIEW

What were the practical effects of the last differential rate case?

What has been the effect of these differentials upon the competition of the north Atlantic seaports with regard to both cargo lots and berth lots?

Why is the port of New York little affected by the port differentials?

Sketch the rise and fall of J. J. Hill's bid for Asiatic trade.

What results were threatened by the substitution of domestic for export and import rates? How was the order modified?

How would the abolishment of thru bills of lading work hardship on American importers and exporters?

CHAPTER XI

SPECIAL SERVICES AND CHARGES

1. *Value of high-grade service.*—The shipping public is as much interested in service as in rates. The ability of a manufacturer or a distributor to compete nowadays is as much influenced by the comparative service as by the relative rates he enjoys. To understand what the railroads do or can do for us, a knowledge of certain factors of service is necessary.

2. *Service of symbol and tonnage trains.*—There are two kinds of freight trains—symbol trains and tonnage trains. Symbol trains are scheduled freights which run daily at a specified time as do passenger trains. The New Haven Railroad, for example, issues a book of the symbol trains on its lines. These trains carry perishable goods, high-class carload lots and so-called "merchandise" cars, namely, cars of the L. C. L. of various shippers consolidated by the railroads into full carloads moving from one point to another. These merchandise cars, moving from New England points thru to destinations all over the country or to an overnight connection with the coastwise lines or oversea lines at New York, have gone far to help New England retain her industrial leadership.

In addition to these symbol trains, usually run

daily, whether a full trainload of high-class freight offers or not, there are "tonnage" trains, run only when enough "dead" freight has accumulated to make a full engine load over a specific route. Lumber, coal, raw cotton and similar material which will not deteriorate in transit are rated as "dead" freight. Not only commercial but also financial considerations justify the granting of preferred service to the traffic moved in the symbol trains, for this traffic is generally rated in the higher freight classes.

Frequently the preferred freight is called "preference freight" or "time freight", and the cars in which it is loaded are designated by a red disc tacked on the outside of the car. Such cars, coming into a yard from a branch line, would at once be switched to a fast freight train. Two examples may be given of the quality of service rendered by the symbol trains of the country. B-H 1, "The Flying Fisherman", leaves Boston at 5:55 P. M. and is at Harlem River at 3 A. M. The distance is 230 miles. This train is designed to serve the New York fish trade. Fish brought to Boston by the Gloucester fishermen this afternoon are at Harlem River at 3 A. M. tonight. Before daylight they are in Fulton Market on the lower east side of New York and appear at the breakfast table in the New York hotels tomorrow morning; and for this service the shipper pays not express rates but freight rates.

3. *Fast freight service to the West.*—The competition of the manufacturers and distributors in Boston,

New York, Philadelphia and Baltimore, has resulted in a wonderful rivalry of service to the West, particularly to Chicago, where connections are made with thru trains for points in the West, Northwest and Southwest. From each of these eastern points, in normal times, there is practically a "third morning delivery" in Chicago; that is, practically a sixty-hour freight service on the fast freight train. The shipper in Boston has his freight accepted at the Boston freight house until one or two o'clock on Monday; the freight is delivered in Chicago on Thursday morning. The New York shipper has his freight accepted as late as 4:30 o'clock on Monday while in Philadelphia and Baltimore freight is accepted until six, all delivered in Chicago on Thursday morning. During the war this third morning delivery was extended to fourth morning delivery.

4. *Thru L. C. L. cars.*—An important consideration for a small shipper of L. C. L. is the number of thru cars—merchandise cars which are run daily from his town to the markets he desires to reach. A railroad will run a direct car from one station to another only when a certain minimum quantity of freight—averaging 10,000 pounds on the railroads in the eastern part of the country—presents itself each day for shipment between those stations. The larger the town, the greater will be the daily number of L. C. L. shipments that present themselves and the larger the number of car minima which can daily be consolidated in direct cars. It is this matter of better service

rather than any advantage in rates, which still makes a large city the most desirable location for the manufacturer or the distributor who is a shipper of high-class goods.

In case the shipping point does not have enough daily freight to make up a carload minimum for a given destination, the freight for that point is put into a car which moves to a transfer point and is there consolidated with L. C. L. from other points of origin and made into a thru car for the desired destination. The object of this procedure is to avoid hauling partially loaded cars. Its effect is to slacken seriously the service available to smaller places.

For example, Boston can load a daily direct car for Cleveland, Ohio. A shipper located in Boston can know that he will have an opportunity to ship every day in a thru car that moves, without breaking bulk, direct to nearly every important point in the country. The shipper located at a smaller point on the Boston and Albany, like Winchendon, Massachusetts, would have no such certainty. It might be days before he and other shippers could provide enough freight to justify a thru car to Cleveland. But, as a rule, he would find that his freight for Cleveland is put into a car loaded for West Albany Transfer.

West Albany Transfer consists essentially of a covered platform, on one side of which lie the loaded cars that have come in from the East, while on the other are "spotted" the empties that are to be loaded for the South and the West. One of the spotted cars is for

Cleveland. Out of the Albany Transfer cars that have come in from all points from the Boston and Albany system enough freight is taken daily to make at least one thru car for Cleveland. So the shipments from the smaller points east of Albany reach Cleveland twenty-four hours later than if they had been put into the direct car from Boston, but probably several days earlier than if each one of them had lain in the station of origin waiting for the carload minimum to accumulate for Cleveland.

Under private competitive management of railroads, if the *average* daily shipment moving between two stations is the above minimum required for running a thru car, such a daily car is usually run "regardless of quantity." Competing railroads may run these R. Q. cars between competitive points even when the necessary average carload minimum is not present. This sort of competition in service has remained strong and has given to large competitive points the advantage in service which they formerly enjoyed in point of rates. It is a disadvantage for the smaller point which no regulation can ever equalize.

5. *"Sailing days" reduce freight congestion.*—Even before the Government took the railroads, the Railway War Board, by the institution of "sailing days", reduced largely the number of "merchandise cars" run from large centers like New York. Instead of running daily merchandise cars from New York, such cars were run only every second day, to all but the most important points and the most important rail-

road connections. The New York roads issued "shippers' guides" giving the reason for the new "sailing days", and designating, opposite the name of each destination point, the days on which freight would be forwarded to that point from each New York station. Moreover, the freight agent would *accept* freight at the stations only on the designated "sailing days."

For example, in the New York Central's "shippers' guide", it appeared that freight for Brewster was accepted daily at the St. Johns Park station, while it was accepted on Monday, Wednesday and Friday at the Barclay Street Station and the Franklin Street Station, the 33rd Street Station, the 130th Street Station, and the Westchester Avenue Station. The New York Central's "sailing days" applied only to shipments destined to points on the New York Central and West Shore east of Buffalo, and to shipments going to railroad connections east of that point.

The "sailing days" resulted in freight being accepted only for points to which it would be forwarded on the day received. There was thus a relief of freight station congestion which results from the storage and rehandling of freight often held a day, waiting for the carload minimum to accumulate. Draymen were enabled to haul on one day the freight which used to be drayed on two or three days, and the number of drays crowding about the station platforms was decreased. Cars were loaded to greater capacity, as the average car loadings were increased by concentrating shipments. Rolling stock was thus

left free for the use of the shipping public and for moving the large quantities of supplies required by the United States and Allied governments in the war. Larger car loadings made it possible to load more cars thru to destination, avoiding delay and rehandling at transfer points. There were loaded a larger number of straight destination cars in solid thru trains, decreasing intermediate yard switching and conserving motive power. At destination stations, freight house and track facilities were conserved by having freight arrive in a smaller number of cars. It was distributed by draymen at destination with fewer trips.

6. *Origin and development of fast freight service.* —Special equipment cars, often privately owned by parties other than the railroads themselves, play an important part in transportation service. Privately owned cars originated in the days when there were no thru railroads. A thru route consisted of a series of unconnected railroads. Even in cases when these roads had the same gauge—which was not always—they generally refused to allow their cars to go off their own lines. At each junction there was a transfer station and all the freight was unloaded from one car and loaded into another.

The result of this, of course, was to retard greatly the thru movement of freight. Fast freight lines, so called, were accordingly established. These lines were at first owned by private companies whose cars ran thru over the lines of different railroads. The shipper

had a bill of lading of the forwarding concern which owned the cars in question, and not a bill of lading of the railroad. Such fast freight lines were the Merchant's Dispatch, operating over what are now the New York Central Lines, and the Star Union Line, operating over the present Pennsylvania road. In some cases these lines were owned largely by directors of the railroad.

In the course of time, as a single railroad obtained ownership of all the links in the thru route—as did the Pennsylvania from New York to Chicago—that railroad bought up both the cars and the trade name of the fast freight line which became simply the trade name for the traffic organization soliciting thru freight.

Long ago all private fast freight lines disappeared. The modern fast freight line is a cooperative organization of connecting carriers. Each of them contributes to the purchase and maintenance of cars and a soliciting force which gets and carries freight over the thru route that these lines form.

7. *Use of refrigerator cars.*—A more recent development is the use of refrigerator cars. The railroads did not build these cars, which were first used for transporting dressed meat, because they had already invested in live-stock cars and did not desire these to fall into disuse. Therefore the refrigerator cars were developed by the great packing houses in Chicago. By playing the railroads off against each other, the packing companies got from them what was at first a

large payment for the use of these cars. The railroad charged the freight rates on the meat which the cars contained, and then paid a mileage rate for their use. In so far as this payment was larger than a proper return upon the investment in the refrigerator cars, it constituted a rebate to the large packers, and aided them to drive the eastward shipment of live stock away from the railroads and to force the smaller meat packers out of business.

Until recently, the railroads paid a mileage of three-fourths of a cent per mile, in both directions, for the use of refrigerator cars. The mileage payment used to be ample, particularly when it is considered that special attention and rapid movement are demanded for these cars and that, as a rule, they are not loaded for the return trip. Recently, however, the refrigerator car mileage has been raised 1 cent, with permission of the Interstate Commerce Commission, so great has been the increase in original cost and operating expenses of these cars. The railroads pay .6 cent per mile for the use of privately owned box cars other than refrigerator cars.

The large packing companies, particularly Armour and Company, have gone into the business of supplying refrigerator cars for purposes other than their own meat shipments. A large proportion of the fruit crops and dairy products of the country is moved in Armour's refrigerator cars. They are similarly used to carry commodities that would otherwise freeze in winter. Most railroads find that it does not pay them

to own their own refrigerator cars. This is for the same reason that it does not pay them to own their own Pullman cars. The use of Pullman cars and refrigerator cars in any large degree is exceptional and seasonal. The refrigerator cars are demanded only when the fruit crops along the particular railroad are moving, and the Pullman cars are required in large quantity only during the summer vacation season. Armour can route his fruit cars over the country, following the fruit harvest and keeping cars continually occupied. He can make money and yet allow the railroads to use his cars at a rate cheaper than the cars would cost the companies themselves. Apparently the only way for the railroads to prevent this situation would be to form a company owned by them jointly to supply cars as Armour supplies them at the present time. There are certain railroads which own large refrigerator-car equipment—for example, the Atchison, Topeka and Santa Fe, and the New York Central Lines.

The great service rendered by these refrigerator cars to the fruit, vegetable and produce districts of the country can hardly be overstated. The wonderful development of orange groves in Florida, orange and lemon groves in California, and the peach orchards in Georgia, would not be possible without refrigerator cars, which make the markets of the entire country accessible to these products.

8. *Reconsignment privilege.*—The privilege of diversion or reconsignment of goods in transit on the

railroads is an important one for many branches of trade. "Diversion" or "Reconsignment" means (a) A change in the name of the consignee; (b) A change in the name of the consignor; (c) A change in destination; (d) A change in route at the request of consignor, consignee or owner; (e) Any other instructions given by consignor, consignee or owner necessary to effect delivery which requires a change in billing or an additional movement of the car, or both.

For example, suppose that a man has shipped fifty carloads of grain—sixty thousand bushels—from Chicago to New York, all-rail. The grain is intended to be exported on a steamer sailing from New York in ten days. When the shipment is half way between Chicago and Buffalo, the shipper receives and accepts an offer of a very low ocean rate, on sixty thousand bushels of grain in a steamer sailing in five days from Boston to Hamburg. On the basis of this low ocean rate, given because the ocean steamer faced the prospect of going out partly empty, the Chicago shipper is able to sell his sixty thousand bushels of wheat in Hamburg at a good profit, so he orders his wheat reconsigned to Boston. He then immediately ships from Chicago sixty thousand bushels more of wheat from his stock there, to fill his engagement for space on the steamer sailing from New York. Reconsignment is the privilege of changing the destination of shipment. The change obviously must be made at some point in transit common to the routes reaching both the original and the changed destination.

John Smith, in New York City, may buy ten carloads of hay and order it shipped from a point in Michigan, consigned to himself at New York, with orders to "hold at Frankfort, New York." Frankfort is a diversion point. Before the hay reaches Frankfort or before the period expires over which it is held free at Frankfort, John Smith sells the car of hay and orders it reconsigned to the buyer, who may be in Springfield, Massachusetts. Except for a "reconsignment charge" of $5.00 per car, the rate paid on that shipment of hay will be the thru rate from the Michigan point to Springfield, and not the combination of locals from Michigan to Frankfort, and from Frankfort to Springfield, or from Michigan to New York City, and from New York City to Springfield, either of which would aggregate more than the thru rate. In the same way, the shippers of lumber and coal consign carloads to themselves to be held at junction points and forwarded thence by the railroad according to the shipper's later orders. This system avoids the labor and expense of storing and later rehandling the coal or lumber into cars.

This privilege of diversion is particularly important in marketing perishable fruit. When the fruit is ripe there is seldom a place to store it at the place of origin. Take, for example, the Georgia peach crop or the California lemon crop. California lemons are put in cars and sent off east. Selling agencies in the East are acquainted with the number and location of cars in transit from the West. These cars are billed

to diversion points on the Missouri River or on the Mississippi River or at Chicago. While the cars are in transit, the Eastern agents sell them in various markets, as demand manifests itself. It is recalled that the same thru rate ($1.25 per hundred pounds) applies to all points on or east of the Missouri River.

The convenience of the arrangement is obvious. It is the same arrangement by which the Italian orange crop is marketed. It is picked and shipped—tho not under refrigeration—north across the Alps. When the cars reach designated diversion points, the railroads receive from the northern selling agencies orders to divert the cars to the markets which can use the fruit in Germany, Austria, Switzerland, Holland, Belgium or France.

9. *Milling-in-transit privilege.*—The purpose of the milling-in-transit privilege is to equalize the position of all manufacturers of a raw material on the route between the point where that raw material is produced and the point where its finished product is marketed. The best example of this is offered in the case of grain products. The flour-milling industry of the country was originally established in the East. It gradually moved west as the grain fields in the Middle West were opened, until a center was established in Ohio, Indiana and Illinois. This center finally shifted to Minneapolis and points on the Missouri River as the spring wheat belt of the Northwest was developed and as the winter wheat belt extended into Kansas and Nebraska.

The result of this situation was that some millers in the East found themselves at a disadvantage in competing for the eastern market with the millers of the Northwest, because the wheat for the eastern millers now must come from the West. Obviously, the eastern miller could not afford to pay the local rate on wheat from Kansas City or Minneapolis, plus the local rate on flour from his mill to the point of consumption in the East. This combination rate would be far higher than the thru rate on flour from Minneapolis or Kansas City to New York, for example. (The rate per hundred pounds on wheat and flour, from the West to the seaboard, has been kept about equal.)

Moreover, the business of the local miller in the Middle West was often damaged by the failure of the wheat crop in his county. He therefore had to get wheat from another district, perhaps two or three hundred miles to the west. This man, again, would have to go out of business if he had to pay the local rate on wheat to his mill plus the local rate on flour from his mill to the point of consumption. Finally, modern milling has developed in the direction of milling not one kind of wheat, but milling several kinds into a blended flour. In order to keep the smaller western milling points on a parity with a competitive point like Chicago, where all rates "break", milling-in-transit privileges were introduced and applied to non-competitive milling points.

These milling-in-transit rates allow a middle-west-

ern miller to intercept wheat on its way from Kansas City to New York, mill it into flour, and forward the flour to New York, the entire charges being so arranged that he pays, for the transportation of wheat in and flour out, approximately the rate on flour from Kansas City to New York. On the New York Central, for example, the charge is 0.5 cent per 100 pounds, minimum $3.00 per car. It should be noted, however, that these milling-in-transit rates have not prevented the shifting of the flour industry farther west. A manufacturer in Minneapolis has the western as well as the eastern market at his disposal, while the Ohio manufacturer is on a par with the Minneapolis man only in the matter of eastern and export markets. The traffic flow of flour is from west to east; the rates "read" in that direction, not in the reverse direction. An exception to this general principle is the recent heavy development of the flour-milling industry in Buffalo. But this is due to the fact that Buffalo is given an advantage in the eastern and export markets by reason of the cheap transportation of wheat from Chicago and Duluth—on the average, in normal seasons 1 cent or 1½ cents per bushel.

Under the pressure of shippers and of the competition of markets, these special privileges of diversion and milling-in-transit have been extended to apply to more and more commodities. Milling-in-transit has been developed into fabrication-in-transit and storage-in-transit and has been applied to a very large number of articles such as iron, steel and lumber.

10. *Terminal or junction switching services.*—The practice of railroads with regard to charges for switching services varies in different localities. In general, the transportation rate, published in the tariff, covers transportation from a public railroad terminal in one city to a public railroad terminal in another. A public railroad terminal consists essentially of a freight house—a covered platform and storage shed combined—where the L. C. L. shipments are consolidated in thru merchandise cars. The second essential of the public terminal is a set of team tracks, tracks in the open, beside which teams can drive for the purpose of loading or unloading carload freight, delivered or received on the team tracks. It will be recalled that carload shippers must load and unload the cars—that is one of the reasons why the carload rate per hundred pounds is lower than the L. C. L. rate. If an incoming carload of freight is destined to be set not on the railroad's team track but on a private siding adjacent to a shipper's warehouse, an extra service devolves upon the railroad. That particular car must be taken by a switch engine and put on the track beside the warehouse. The movement of a car to and from a classification yard, or to or from the railroad's main line, is known as switching, for which in some cases the railroad makes a charge in addition to the regular transportation rate.

11. *Charges for switching services.*—The question of absorbing, that is, not charging for switching, is a good illustration of the power of the railroads to do

far more for the shipper in the way of rate concessions than they can be forced to do.[1] It appears, however, that the Interstate Commerce Commission will force the railroads to absorb the switching charge when the service rendered by the railroad, in the case of that switching, is not more costly than the service it would have to render if the car were delivered at the public terminal. A freight train does not run from a freight house in Boston to a freight house in New York. It runs from a classification yard in New York to a classification yard in Boston. There the arriving cars are sorted out for various delivery destinations. If the cost of delivering the car from the classification yard to the shipper's siding is not greater than the cost of delivering it to the railroad public terminal in Boston, there is no reason why an extra charge should be levied upon the shipper. It was this consideration which moved the Supreme Court of the United States in 1914, in the Los Angeles Switching Case (234 U. S. 294), to reverse the Commerce Court and sustain the Interstate Commerce Commission in its order to the railroads to cease charging $2.50 per car in addition to their transportation rate, for traffic handled on side tracks at Los Angeles and San Francisco.[2]

[1] The Interstate Commerce Commission takes the viewpoint that in the absence of unreasonable and detrimental effect upon shippers or consignees, the matter of charging or not charging for special switching services concerns only the railroad, and the Commission will not interfere. In the absence of unreasonable discrimination, the Commission does not recognize differences of practice at different points as constituting cause for complaint.

[2] The Supreme Court sustained the Commission's reasoning that the industrial spur tracks and sidings at Los Angeles constituted a part

In the East, as a rule, railroads absorb the switching charges on carload freight destined to or coming from industries to which they have direct track connection by siding. The purpose of this is to influence the location of industries along that particular railroad's line. It also serves to unburden the heavily congested railroad public terminals. If the absorption of switching charges in this country were to end, the public terminals of the railroad, in some places, would be subjected to a flood of traffic that they could not possibly handle. In other places, shippers would still find it cheaper to pay switching than to team to public terminals.

On March 2, 1918, the Railroad Administration wrote to the State Railroad Commissions and asked their judgment upon a proposed charge of $3.00 a car for switching a car to a private siding and "spotting" it at the desired location there. Shippers, who first heard of the proposal thru their state commissioners, raised such a protest that it was dropped. Mr. McAdoo estimated that the measure would bring $175,000,000 in revenue. Representatives of shippers said it would represent a burden of $400,000,000.

12. *Interline terminal switching.*—A complication arises when we have an instance of a carload arriving in a city by one line, destined to a consignee who is

of the carrier's public terminal and that the service upon them was similar to the service on team tracks. The Court refers also to the distinction between delivery of traffic to concerns located upon spur tracks and sidings, and "delivery thru a system of interior switching tracks constructed as plant facilities."

located on a siding off another line. This delivering line must take the carload from the road which has hauled it and deliver it upon the siding where it is wanted. The delivering line naturally charges the carrying line for this service, and the carrying line, according to circumstances, either "absorbs" this switching charge or else adds it to its rate and charges the shipper for it. Such an interline switching charge is often a fixed amount for a hundred pounds (generally 3 cents) or a fixed amount per car ($3.00 to $5.00).[1]

The considerations affecting this absorption may be illustrated by a specific case. Boston is served by both the Boston and Albany and the Boston and Maine Railroads. The connection between the two roads is formed by the Grand Junction Branch of the Boston and Albany, which meets the Boston and Maine at East Somerville. The Grand Junction branch terminates at East Boston, where, at the railroad docks, lie many of Boston's oversea lines.

Suppose a carload of export freight is shipped from Nashua, a point reached only by the Boston and Maine. To put this freight on shipboard will cost the Boston rate plus a switching charge on the Grand Junction branch of the Boston and Albany, 2½ cents per hundred pounds, minimum $5 per car. The $5 per car is what the Boston and Albany charges for switching the car to its dock; the Boston rate is the

[1] The 25 per cent rate increase and the $15 per car minimum did not apply to switching charges in connection with a line haul. But they did apply to inter-terminal or intra-terminal switching.

Boston and Maine's rightful compensation for hauling the car from Nashua. Only the Boston and Maine reaches Nashua, and this railroad need make no sacrifice in the matter of absorption of switching charges, in order to get the car to haul.

If the export car originated at Buffalo, the New York Central and the Boston and Albany would, of course, haul it to the Boston and Albany docks for the flat Boston rate. The car could also be moved from Buffalo via the West Shore and Boston and Maine. But these roads could manifestly charge no more than the Boston rate from Buffalo to the Boston and Albany docks, for the Boston and Albany and the New York Central stand ready to haul the car there at this flat rate. Therefore, the Boston and Maine must absorb into the Buffalo-Boston rate the switching charge which the Boston and Albany sees fit to make for hauling the car to the docks from the junction at East Somerville. Now the Boston and Albany does not care to encourage the route via the Boston and Maine of traffic which it can itself carry, so on this competitive traffic its charges for switching are 4½ cents per hundred pounds, minimum $9 per car. The Boston and Maine stands willing to absorb this charge on export traffic.

That is, switching charges are absorbed, not added to the rate, in the case of competitive traffic, and they are not absorbed in the case of local or non-competitive traffic.

Even when a railroad thus absorbs interline switch-

ing, it generally does so only when it earns a certain minimum on a car. For example, in Buffalo the New York Central absorbs switching of $6.10 per car when its earnings on a carload are $15.00 or more.

13. *Government considers abolishing switching absorptions.*—A few months after taking over the railroads, the Government, in the interest of increasing its revenues, considered the abolition of switching absorptions on "competitive traffic." Southeastern shippers made a vehement and successful protest.

They give an example of the hardship that would be entailed by the innovation. A manufacturer of Richmond, with his plant on a private siding connected with the Southern Railroad, wants to sell to a man in Atlanta with a warehouse on the Atlantic Coast line or a private siding connected with the rails of that carrier. Naturally this buyer will ask for Atlantic Coast Line delivery in Atlanta. If the manufacturer in Richmond, by paying the flat rail rate, can get Atlantic Coast Line delivery in Atlanta, he can do business in competition with a rival who has his plant on the Atlantic Coast Line in Richmond. The Richmond manufacturer on the Southern might not be able to compete for the Atlanta business if he had to stand a switching charge in Atlanta. The present arrangement of absorbing the switching charges of competitive traffic increases competition among producers. Moreover, in theory, the transaction is of benefit both to the Southern and to the Atlantic Coast Line because, at some time, the deal

will be the other way around and a manufacturer on the rails of the Atlantic Coast Line will desire to make delivery to a customer whose warehouse is on the rails of the Southern, without having to pay an extra switching charge. Reciprocal absorptions of switching charges represent the exchange of services which equal each other.

In April, 1918 (49 I. C. C. 678), the Interstate Commerce Commission voiced its disapproval of penalty switching charges on competitive business strongly. It decided that a charge of 4.2 cents per hundred pounds for taking competitive traffic from the Baltimore and Ohio to the Western Maryland at Baltimore, was unreasonable to the extent that it exceeded 2 cents per hundred pounds, or a minimum of $5 per car.

14. *Carrier must furnish connections to shipper.*— The obligation of a carrier to furnish suitable connection with the side track of a shipper is stated in Section 1 of the Act to Regulate Commerce. It reads:

> Any common carrier subject to the provisions of this Act, upon application of . . . any shipper tendering interstate traffic for transportation, shall construct, maintain and operate upon reasonable terms a switch connection with any such private side tracks which may be constructed to connect with its railroad, where such connection is reasonably practicable, and can be put in with safety and will furnish sufficient business to justify the construction and maintenance of same; and shall furnish cars for the movement of such traffic to the best of its ability without discrimination in favor of or against any such shipper.

Before the Government took the railroads, there was great variation in the practices of the carriers regarding private side tracks. They differed especially in the extent to which they participated in the cost of constructing and maintaining tracks on the shipper's land. Uniformity of practice was brought about by the Director General's general order 15, dated March 26, 1918. It prescribed the following requirements with regard to the construction, maintenance and operation of new industry tracks:

(a) The industry shall pay for, own and maintain that part of the track beyond the right of way of the railroad company;

(b) the railroad company shall pay for, own and maintain that part of the track on the right of way from the switch-point to the clearance point;

(c) generally speaking, an industry shall pay for and maintain (altho in special cases the railroad company may do so) and the railroad company shall own, that part of the track on the right of way from the clearance point to the right of way line;

(d) if the industry fails to maintain in reasonably safe condition that part of the track which it is required to maintain, the railroad company may disconnect the track or refuse to operate over it when not in such condition;

(e) the railroad company shall have the right to use the track when not to the detriment of the industry;

(f) the foregoing terms and conditions should be embodied in a written contract between the industry and the railroad company.

The order further stated that in cases where industry tracks already existent were not covered by written contracts, they should be operated and maintained

in accordance with the above provisions. Where written contracts existed, they should be observed, but where they appeared to work injustice to the carrier they should be brought to the attention of the Director General.

15. *Use of trap cars.*—Something analogous to the switching of carload freight is the granting of a ferry car or trap car service in the case of L. C. L. freight. For example, the New York Central Railroad will without charge switch a "ferry" car with 12,000 pounds or more of L. C. L. to or from a warehouse, industry or commercial plant having track connection with the railroad, when such freight has been received or is to be forwarded via New York Central in road haul. In cases where such a car contains less than 12,000 pounds, it is subject to a switching charge which varies from $2 per car at Rochester to $5 per car at Syracuse. The car is generally switched between the private siding and the railroad freight house where, if inbound, it is unloaded from a merchandise car; if outbound it is loaded into such a car. Sometimes the "ferry" car can move direct between the private siding and a transfer station of the carrier.

In this latter case, the L. C. L. need not go thru the railroad local freight house and the "ferry" car service results in an unburdening of the road's local terminals. In any case, the receipt of this L. C. L. by car instead of by dray prevents a congestion at the freight house receiving platform and the streets

leading thereto. "Ferry" cars at a local station are usually transferred (transshipped) at night. Free "ferry" car service tends to induce a shipper to give his L. C. L. business to a railroad on which he has a private siding, just as free switching tends to make him give his carload business primarily to the carrier on whose line he is located. Free "ferry" car service of course means the elimination of any drayage charge on the L. C. L. to which it applies.

16. *Chicago reciprocal tariffs.*—Chicago has the most liberal interline switching arrangement in the country, contained in the so-called Lowery tariff, which has been in force since 1911. It is an arrangement by which a carrier railroad will deliver a car anywhere in Chicago, on the tracks or industrial sidings of any other line, at the flat Chicago rate. The carrier, of course, absorbs the switching charges levied upon it by the delivering road. This is the Chicago reciprocal switching tariff. It is costly to the railroads, but a very great convenience to the shipping public of Chicago.

17. *Carriers protected against lending terminals to competitiors.*—This practice of one road opening its terminals to competitive freight carried by another can come about only by voluntary action of the road owning the terminal. Supreme Court decisions protect carriers from the necessity of lending their preferred terminals to rivals. This protection is of course abrogated during government operation of the carriers as a unit. For example, the Pennsylvania's

expensive passenger terminal in Manhattan has been thrown open to the other Jersey roads.

18. *Commission unable to prescribe reciprocal switching tariffs.*—The communities of New Jersey, opposite New York City, found to their sorrow that the Interstate Commerce Commission was powerless to *prescribe* reciprocal switching tariffs where the railroads did not instal them voluntarily. In the so-called Jersey Rate Case, the Jersey communities asked the Commission to force the establishment of reciprocal switching tariffs on the part of the trunk line railroads terminating at the port of New York. The Commission refused, for reasons given in this example (47 I. C. C., 722):

> The plant of Colgate and Company, manufacturers of soaps and perfume, is located on the tracks of the Pennsylvania, Jersey City. A carload of soap shipped by this company to a consignee in Buffalo can be hauled the whole distance by the Pennsylvania. If the switching arrangements requested by the complainant were established, Colgate and Company could require the Pennsylvania to switch the car a mile or two to a junction with the Erie, from which point the Erie would haul it to Buffalo. Such an arrangement would short-haul the Pennsylvania quite as effectively as the establishment of a thru route and joint rate over that route, and in requiring such a service we should simply accomplish indirectly what is expressly prohibited by the Act, namely, requiring a carrier to participate in a thru route embracing substantially less than the entire length of its line between the points in question. It cannot be denied that the establishment of such reciprocal switching would be of benefit to the people of Jersey City and Hoboken, but the Commission derives its authority from the Act to Regulate Commerce, and it can afford no relief which is not authorized therein either expressly or by direct implication.

19. *Use of lighterage facilities.*—New York has an exceptional terminal situation, unlike anything else in the country. It will be described in more detail later. In general, it suffices at this point to say that all of the New York railroads excepting the New York Central, so far as their freight-carrying services are concerned, terminate before reaching Manhattan Island, at the Harlem River in the Bronx. The railroads must then ferry their cars to Manhattan and Brooklyn on carfloats or else unload the cars and deliver the freight on lighters. In either case, all distance traffic excepting the traffic to and from New England is delivered in carload lots at the flat New York rate anywhere within the "lighterage limits", which are in some cases twenty-six miles apart and, in general, include the water front of all of Greater New York. The routes from New England—the Harlem division of the New York Central and the New Haven Railroad—charge 2 cents or 3 cents per hundred pounds over the New York rate for deliveries at all points excepting the few freight stations to which they specifically float their loaded cars and which, therefore, become their terminal stations.[1]

There are other ports besides New York in which the terminal services of the railroads are extended, by means of lighterage, in a manner similar to switching services. For example, in Baltimore all carload

[1] As a war measure the free lighterage of domestic freight in New York harbor was discontinued. That is, consignees had to take freight delivery at the nearest freight station or team track of the delivering railroad.

freight paying the railroad carrier 7 cents per hundred pounds or over, is delivered to or taken from any point within specified extensive lighterage limits in the harbor of Baltimore. It should be noted that this service is not rendered simply in connection with steamship lines, but also in connection with factories located at different points on the harbor and having their connection with the railroad by means of lighters instead of by rail direct. In Philadelphia there is a similar provision. The terminal tariff on carload freight paying the Philadelphia carrier 8 cents per hundred pounds or more, provides for the delivery of carloads to, or collection of carloads from, any point within lighterage limits, subject to minimum of 75 tons on a lighter, or 4 carloads on a float if freight is car-floated. If the railroad rate is less than 8 cents per hundred pounds, 3 cents per hundred pounds is added for the lighterage or floating service, but the total in no case is to exceed 8 cents per hundred pounds. Similarly, in the case of Baltimore 2 cents per hundred pounds is added for lighterage in the case of freight that does not pay a rate of 7 cents per hundred pounds; but the total in no case is to exceed 7 cents per hundred pounds.

20. *"Store-door delivery."*—A service for L. C. L. freight, not dissimilar to free switching, was the so-called "store-door delivery", which until recently was accorded to shippers of certain classes of freight in Washington and Baltimore. The "store-door" system is best seen in operation in England. There the

railroad rate includes the service of the railroad drayman in taking the freight from the shipper's warehouse to the railroad's freight house, and later in delivering it from the railroad's freight house to the consignee's warehouse. Most English traffic moves on rates which include these drayage services at each end of the haul, so that such British rates are not properly comparable to American and German rates, which provide merely for movement from station to station.

In Baltimore the railroad carriers until September 1, 1913, maintained a "store-door pick-up and delivery service" on L. C. L. freight from New England and certain other defined eastern territories—all L. C. L. freight paying the rate of first, second or third class. On September 1, 1913, the carriers discontinued this free Baltimore trucking service, but did not reduce their rates. The Merchants' and Manufacturers' Association of Baltimore contested the railroad's action before the Interstate Commerce Commission, but lost. It is said that this store-door delivery custom originated among the railroads for the purpose of meeting a similar service rendered, free, by the water lines from New England. Store-door delivery is now contemplated to relieve congestion at New York freight stations. (See Chapter XIII.)

21. *Off-line offices abolished.*—It will be recalled (Chapter III) that one of the measures of economy introduced by the Director General of Railroads was

to abolish the so-called "off-line" offices of the carriers. That is, it forbade railroads to have commercial representatives at points not reached by their rails. The hardship temporarily imposed upon the shippers is indicated by a description of the work an off-line commercial agent of one of the trunk lines used to do, located, say, in Omaha.

He quoted domestic and foreign rates applying to traffic moving over his system and gave out every kind of information regarding the situation there. He could tell where there had been a crop failure, where there was a temporary embargo, what was the best terminal delivery—in each given case—in large cities on his system. He kept files of tariffs and circulars applying to it. He quoted rates to railroad connections as well as to individuals. To him were sent "passing reports" of carloads and merchandise cars moving to and from Omaha over his trunk line and from those car reports he was able to get information on delayed shipments, and trace them. He exercised supervision over package car service to and from Omaha moving over his line. He handled foreign freight matters, including booking and terms, export and import. He not only looked after tracing, but after diverting and reconsigning carload freight, and gave exchange bills of lading. He adjusted claim matters. When this man disappeared there was a big void that could not for a long time be filled by representatives of the local Omaha lines.

An attempt was at once made to build up in local

offices the files of information formerly contained in the off-line offices. For example, each terminal carrier in New York City had assigned to it a number of foreign lines, not terminating in New York. One of the lines assigned to the Baltimore and Ohio was the Chicago and Northwestern. Shippers who had formerly turned to the New York representative of the Northwestern, were instructed to turn to the general freight agent of the Baltimore and Ohio in New York City.

REVIEW

Define "symbol trains," "tonnage trains," "merchandise cars."

Explain the operation of transfer stations.

What has been accomplished thru the introduction of "sailing days"?

Describe the operation of reconsignment and in-transit privileges.

What is the general rule regarding the absorption of interline terminal switching charges? How has the Government regarded it?

What attitude toward reciprocal switching tariffs did the Commission take in the Jersey Rate Case?

CHAPTER XII

SPECIAL SERVICES AND CHARGES (*Continued*)

1. *Elevator service rendered by railroads.*—A special terminal service is rendered by the railroads, or paid for by the railroads, in the case of grain. In the early days in the West, it was cheaper to erect a grain elevator for the storage of grain as it came in from the harvest than it was to keep the railroad's cars holding that grain at the primary market in the West until it was sold and distributed. The unloading of the cars into the grain elevators released the railroad's equipment for other purposes.

The next move was for the railroads to pay to elevator companies allowances of so much per bushel for elevating and storing for a short period grain brought into a primary market on their lines. These elevation allowances were ordered discontinued by the Interstate Commerce Commission upon the ground that they consituted unfair discrimination against the small shipper who owned no elevator. The elevators were frequently owned by great grain-buying houses like Peavey of Minneapolis or Armour of Chicago. The Supreme Court reversed this order of the Interstate Commerce Commission on the ground that the railroads could properly pay private parties for per-

forming services which the railroads otherwise would have to perform themselves.

The charges for elevation of grain at the ports between Boston and Baltimore inclusive are designed to be identical; any discrimination in these charges, which are added to the rail rate, would disturb the balanced system of cost of getting export traffic on board ship at these ports and thus defeat the ends of the Interstate Commerce Commission in its differential case decisions.

At Baltimore, the Baltimore and Ohio, the Western Maryland and the Pennsylvania Railroads have grain elevators. At Philadelphia, the Pennsylvania and the Reading Railroads have grain elevators. In New York, grain elevators are attached to the New York Central, the West Shore, the Erie, the Pennsylvania and the Lehigh Valley. In Boston, the Boston and Maine and the Boston and Albany have elevators.

2. *Charges for elevator service.*—At each of these ports, the terminal seaboard railroad maintains the grain elevator for the temporary storage of grain until the exporting vessel is ready to carry it. For the services of this railroad elevator a charge is made everywhere except at New York. The uniform charge is 0.9 cent per bushel, which includes elevating the grain from the cars, storing it and insuring it for a certain period and then spouting it into a vessel lying alongside the elevator. (The elevation charge at Philadelphia and Baltimore is only 0.75 cent per

bushel, but it does not include insurance and it does not provide for so long a period of storage as does the Boston charge. Allowing for these factors, the Philadelphia and Baltimore charges are about the same as in Boston.[1])

A comparison of the elevation charges at New York and Boston shows how much the New York railroads do to favor that port. In Boston the charge for the elevator service is 0.9 cent per bushel and this payment goes to the railroad owner of the elevator. The railroad's earnings on export grain from Buffalo to Boston are thus:

Ex-Lake Rate	5.5 cents [2]
Elevation	0.9 cent
Total.....	6.4 cents per bushel

The Buffalo-Boston railroad route earns 6.4 cents on the shipment.

In New York the case is different. As a rule the piers are not adjacent to the railroad elevators. The steamers lie in Manhattan or Brooklyn or Hoboken and grain must be brought to them in barges from the railroad terminals on the New Jersey shore. When the barge has been brought alongside the steamer, the grain must be transferred to the ship by means of a

[1] In New York the railroad elevators charge only 0.5 cent per bushel for spouting grain direct into a vessel lying alongside. Much grain has moved abroad by this method in full steamer loads since the outbreak of the European war.

[2] The above export rate of 5.5 cents is a normal pre-war rate. At present the ex-Lake rate to Boston and New York for export is 8.9 cents per bushel; to Philadelphia and Baltimore, 8.6 cents.

floating elevator. For this service the floating elevator company makes a charge of 0.9 cent per bushel, which is added to the railroad ex-Lake rate of 5.5 cents. This makes 6.4 cents per bushel, which charge is all the grain can stand and yet move thru New York.

3. *Advantages of shipping grain via New York.* —Therefore, the New York railroad finds itself compelled to give the service of its stationary land elevator free and also to barge the grain free alongside any steamer within the lighterage limits of the port. The barging is at an admitted minimum cost of 1 cent per bushel. The earnings of the New York Central on grain from Buffalo to New York are 1.9 cents per bushel less than those of the New York Central (Boston and Albany) to Boston. They are 1 cent less because of the barging done in New York and not done in Boston; 0.9 cent less because 0.9 cent is collected for the use of the road's stationary elevator in Boston, while the railroad elevator renders the same service free in New York. Philadelphia as well as New York delivers grain free to any liner in port.

The New York system is very flexible. The shipper who uses New York has certain important advantages over the shipper who uses Boston. The grain sent to New York and put in a New York elevator is available for shipment by any vessel in port at a total charge of 6.4 cents per bushel from Buffalo to the vessel's hold. The grain sent to Boston is

available for shipment, at a cost of 6.4 cents per bushel from Buffalo, only by the vessels at the individual steamship terminal of which the elevator is a part. For lightering grain to vessels lying elsewhere, Boston has a charge of 0.5 cent per bushel. For several reasons the grain dealers appreciate the flexibility with which they can dispose of their export grain in New York, and they miss the same flexibility at Boston.

Often a parcel of export grain sent to New York and booked for shipment via a steamer some weeks ahead, has an opportunity to get "distress room" on another steamer and thereby be shipped at once. "Distress room" means the offer of a low freight rate because the steamer has been disappointed in its expectation of filling up with higher class freight, and so will take grain for next to nothing rather than go out only partly filled. The exporter resells his parcel of grain to the market reached by the boat offering "distress room", ships the grain by that route, and brings on from Buffalo other grain of the same grade to fill his original engagement. The possibility of such diversion in New York puts a premium on shipments via that port.

There is a still greater premium put on sending to New York grain for storage awaiting sale for export. It is true that Buffalo is the best place for holding grain whose destination is undetermined, and the elevators of Buffalo are used to capacity for that purpose. The grain may be sold to Buffalo mills or to

New York City; it may be sold for export by any vessel sailing from any north Atlantic port from Boston to Baltimore. These ports are reached within two or three days by rail from Buffalo. But Buffalo elevators are filled early each fall. Then there is no doubt as to the desirability of sending wheat to a port which, for a 6.4 cents charge, gives it the choice of shipment via any of the many steamship lines at New York rather than to a port which, for a fixed 6.4 cents charge, gives it the choice of shipment via only the few lines docking at the Boston terminal to which the storage elevator is attached.[1]

4. *Demurrage and track storage charges.*—In the early days of railroad development it was customary for shippers to hold railroad cars as long as they chose and use them for storage purposes. The practice has not been unknown in recent years, tho the railroad demurrage charges operate against it. Such abuse of the railroad's rolling stock by a shipper is an injustice to other shippers because it diminishes the carrying capacity of the railroad upon which other shippers also depend.

Demurrage charges have only recently become uniform thruout the country. They are applied on the principle that a charge of so much per car per day should be levied upon a shipper who does not within a specified "free time", unload the car which the rail-

[1] This whole discussion of port grain charges refers to the competitive movement of grain in normal times. In war-time, grain prices were fixed, exports were allotted and ports assigned for each bushel of the export movement.

road turns over to him. The country was formerly divided into a large number of "demurrage" bureaus or associations of railroads which have uniform regulations with regard to demurrage. The New England Demurrage Bureau allowed 96 hours of free time. The general rule in the United States was 48 hours of free time. Forty-eight hours is now universal.

As the railroad terminals became more congested it proved desirable, especially in the larger cities, to put an additional charge, over and above demurrage, upon a shipper who held up the work of unloading cars on the railroad's team tracks. This charge was called a "track storage" charge. The New York Central has team tracks on Manhattan Island in its 30th Street yard. A slight distance from this yard the Pennsylvania, the Lehigh Valley and the Baltimore and Ohio have team tracks at which they deliver carload freight, which they float across the Hudson River to these small yards. The value of real estate in New York is high and the railroads offer every inducement to make shippers unload the cars promptly and not hold them up. Therefore, following the free time of forty-eight hours there is a track storage charge, applying on cars held in these Manhattan yards, of $1.00 per car for the third day and $2.00 for each succeeding day thereafter.

In many cities where the volume of traffic moving thru the railroad freight houses is large and where the handling capacity of those freight houses is

limited, as is the case with the railroad pier stations on Manhattan Island, it is the practice for the railroad to reserve to itself the right to remove goods at the expense of the shipper and store them at his expense in a warehouse at the expiration of the 48 hours of free time.

5. *Demurrage regulations of Director General.*—In general order 7, effective February 10, 1918, the Director General of Railroads issued identical demurrage rules and charges for the entire country. It provided that there should be forty-eight hours' free time for loading or unloading on all commodities; and twenty-four hours' free time on cars held for any other purpose permitted by tariff (cars held for switching orders, reconsignment or reshipment in the same car, cars held in transit and placed for inspection or grading, etc.).

The demurrage charge on all cars, after the expiration of the free time allowed is $3 for each of the first four days, $6 for each of the next three days, and $10 for each succeeding day.

An earlier general order of the Director General had abolished the "average agreement" which was part of the previous demurrage rule. General order 7, now in effect, reinstated the "average agreement rule." The "average agreement" if signed by a shipper provides for a monthly settlement of the shipper's demurrage debts. It allows him to offset credits—which he earns by unloading cars within twenty-four hours—against the debits which accrue against him

for each day he holds a car in excess of the allowed forty-eight hours' free time.

Another important demurrage regulation is the so-called "bunching rule", also approved in general order 7. It is stated as follows:

> Cars for *unloading or reconsignment*.—When, as the result of the act or neglect of any carrier, cars originating at the same point or intermediate points moving via the same route and destined for one consignee, at one point, are bunched at originating point, in transit or at destination, and delivered by the carrier in accumulated numbers in excess of the rate of shipment, the consignee shall be allowed such free time as he would have been entitled to had the cars been delivered in accordance with the daily rate of shipments.

There are certain cars to which these demurrage charges do not apply, cases which are covered by other railroad tariffs; for example, cars loaded with live-stock, empty cars placed for loading coal at mines, foreign export freight waiting to be shipped at ports.

6. *Belt lines—industrial type.*—The railroads serving a city do not always make direct connections with one another. In some cases there is a separate company—privately owned or owned by the railroads jointly—which provides for this connection by means of a belt line. There are several distinct types of belt lines and they serve different purposes.

One type is the industrial belt line, joining all the railroads of a city. Such a line is usually formed by a private company interested in the industrial development of the land thru which the belt line runs. Thru competition the various rail carriers come to

consider such a belt line as a part of their own rails, absorbing into the local rate the switching charge which the belt line makes for interchanging cars between its junctions with the rail lines and industries located on the belt. Industries so located thus have the advantage of being situated on practically every railroad line of a city, with each railroad competing for business of the belt by rendering superior service to its patrons. A belt line of this type is the railroad line of the Canton Land Company around a section of Baltimore harbor. It has direct rail connection with the Pennsylvania and the Baltimore and Ohio, and connection by car float with the Western Maryland.

7. *Terminal charges.*—Two decisions seem to have established the principle that railroads which own terminal roads in cities must deliver to those terminals at the same rate as if they delivered the goods to their own terminal. The Supreme Court in the case of the Chicago, Milwaukee and St. Paul Railroad vs. the Minneapolis Commerce Association, decided June 10, 1918, agreed with the Minnesota State Railroad Commission and the courts that, for purpose of delivery, the Minneapolis and Eastern Terminal Railroad is part both of the Chicago, Milwaukee and St. Paul and of the Northwestern Roads—these being the two owners of the Minneapolis and Eastern Terminal.

A month later, the Interstate Commerce Commission in a tentative report of Examiner J. Edgar Smith

followed the decision of the Supreme Court in the Minneapolis Terminal Case. The Norfolk and Portsmouth Belt Line, cutting all the railroads at Norfolk and Portsmouth, has its stock owned jointly by the Seaboard Air Line, the Atlantic Coast Line, the Norfolk and Southern. On lumber from distant points they absorb the switching charge for delivery to points on the belt line ($1.50 per car). They declined to absorb this charge on lumber traffic from near-by Carolina points, on the ground that the rates were not high enough to cover the cost of making belt line delivery in Norfolk. The Examiner found that it was undue discrimination for them to refuse to make delivery at the flat Norfolk rate. That is, if railroads combine to build a belt line, the rails of the belt line become their own for all practical purposes, notwithstanding the different corporate entity concerned.

8. *Detour belt lines.*—The second type of belt line is a detour or outer belt, designed to divert cars around a congested area in their passage from one railroad line to another. This obviates the necessity of bringing cars into the city and switching them from one crowded terminal to another under all the limitations put upon movements of cars on tracks in the interior of the city. Several such lines or sections of lines have been built around the city of Chicago and make it unnecessary for cars coming from beyond Chicago and destined beyond Chicago to be run into the city.

9. *Water-front belt lines.*—The third type of belt

line, the water-front belt, serves the purpose of coordinating rail and water lines. A belt line of this sort is designed to run along the water front, cutting all the railroad lines, and with spur tracks running on all the piers. Where such a belt line is operated by the port authorities or some other neutral body, it takes cars from any railroad and sets them on any pier with dispatch and at uniform, low charge. The steamer at each pier compels each railroad to compete for the steamer's shipments and to absorb the belt switching charge into its local rate; every rail line similarly competes for inbound shipments in the important matters of car supply and service to the interior. The port of New Orleans and the port of Montreal have water-front belt lines of this type.

10. *Industrial railroads.*—A problem similar to the problem of switching charges was raised by the cases of "industrial railroads" and "tap lines." An industrial railway is simply an extension of an industrial siding, already described. As an industrial plant grows in size, this industrial siding must be extended to serve the various factory buildings, warehouses, storage yards, etc., which are part of the plant. It is apparent that free switching to and from the distant portions of such a plant is quite different from the mere switching of a car a few rods away from the railroad's track to the warehouse of a merchant or a small manufacturer.

The service accorded to large industries by the railroads has been by no means uniform. In some cases,

for the payment of the flat rate, the railroad pushed the railroad cars upon the industrial track connecting with the railroad's main line, and left the work of distributing those cars to the locomotives of the industrial concern. In some cases it was the practice for the railroads to send their locomotives to the plant's tracks, shift cars about, deliver and receive cars at desired points all over the industrial railroad, all without charge. In some cases large concerns preferred to do this work with their own locomotives, and the railroads allowed the industrial concern a switching charge or even a proportion of the thru rate to recompense it for doing this work. In the case of some of the larger industrial companies, such as steel plants, the competition of carriers for the large traffic involved led the carrier to perform for these concerns a larger and larger terminal service for nothing, or else allow the company a larger and larger terminal payment for performing this service.

The question of allowing such payment to companies first came before the Interstate Commerce Commission in a peculiar form. The Arbuckle Company operates a sugar refinery in Brooklyn. Attached to the refinery on the water front is a terminal connected by the company's line of car floats with the terminals of the various railroads in New York City and the Jersey shore. From this Jay Street Terminal, which it owns, the Arbuckle Company ships not only its own sugar but miscellaneous freight,

which, as agent for the railroad companies, it accepts from Brooklyn shippers. On all traffic delivered to the trunk line railroads, Arbuckle receives a terminal allowance because he does work which they otherwise would have to do, in the matter of getting his freight and that of other Brooklyn shippers from the Brooklyn shore to the New Jersey terminals of the roads.

At the same time, Arbuckle pays only the flat New York rate for his own shipments to the West and receives an allowance out of that rate. From one point of view this might seem like a rebate. It was so considered by the Federal Sugar Refining Company of Yonkers, which demanded that it should, in fairness, receive the same allowance given to Arbuckle if it delivered by lighter its own sugar from Yonkers to the terminals of the railroads. The weakness of the case of the Federal Sugar Refining Company lay in the fact that its shipments originated outside of the "lighterage limits" of New York and the railroads did not pretend to absorb into the thru New York rate the cost of terminal services to and from points outside the lighterage limits. Also, the Federal Sugar Refining Company has an all-rail connection with one carrier, the New York Central, while Arbuckle has no such connection.

In its 1909 annual report, page 18, the Interstate Commerce Commission indicated its intention to prevent allowances by the railroads to large industrial concerns for what were, in the view of the Commis-

sion, plant or delivery services which the industrial concern should take care of itself. In that report the Commission said:

It becomes increasingly evident that complete freedom from discrimination can be secured only by a complete separation of the business of transportation from all other business. The evils most difficult to detect and prove today are those arising from the identification of ownership of carriers and shippers, and those arising from the pretense that services performed by shippers for themselves are in reality services for the carriers, to be paid for by the latter. The lighterage situation in the harbor of New York, between the trunk lines and certain shippers of sugar and the various industrial railroad arrangements with divisions of joint rates are examples of the identification of shippers and carriers which naturally result in embarrassing, if not preferential, relations. As soon as the shipper secures an arrangement by which he is to furnish a part of the service of transporting his shipments, with a right to an agreed portion of the freight rate, it becomes impossible to determine whether or not the net cost to him is the same as other shippers are forced to pay. In many cases, however, it is entirely possible to say that such shipments have a competitive advantage in the market.

In 1909 (17 I. C. C. 40) the Commission refused to grant the petition of the Federal Sugar Refining Company, on the ground already given, namely, that their plant was outside the lighterage limits. But in 1911 (20 I. C. C. 200) the Commission forbade the railroads to pay an allowance to Arbuckle unless it paid a similar allowance to the Federal Sugar Refining Company, on the ground that this was discrimination. The order of the Commission was enjoined by the Commerce Court, was carried to

the Supreme Court of the United States on appeal, and the fight was on.

11. *Tap lines.*—In 1912 the same issue came before the Commission in a slightly different form. That was in the so-called "Tap Lines" decision (23 I. C. C. 277). A tap line is a line built by an industry (especially coal mines and lumber mills) to connect with a railroad. These tap lines were being granted divisions of thru rates and there were cases where the division was out of proportion to the cost of the service which the tap line performed in bringing the tap traffic to the railroad line. The size of the concession, in the way of the rate proportion which the tap line could get from the railroad, often depended upon the volume of traffic which the tap line had to offer, and particularly upon whether the line connected with two competing railroads that it could play off one against the other. The decision of the Commission was that the railroad should cease granting rate proportions to lines which were engaged primarily in serving the industry which owned them. It was recognized that it was proper to make allowances to those few tap lines —tho such were rare—whose main business was to act as a common carrier, transporting primarily for the public and not for their industrial owner. The Commission's own abstract of its decision is brief:

> The common ownership of an industry and the short line serving it is not in itself sufficient to divert the railroad of its status as a common carrier. On the other hand, the fact that the rails, locomotives and cars of an industry have been

turned over to an incorporated railroad company, owned and operated by the industry or in its interest, does not divest those appliances of their character as a plant facility if such, in fact, is the case. A line must be drawn at some point between ordinary transportation and what is industry, and between a facility of transportation and a plant facility or tool of the industry. Each case, however, must stand on its own facts. On the facts shown of record: *Held* that the service performed for the proprietary lumber companies by certain tap lines described in the report is not a service of transportation by a common carrier.

The railroad carriers filed tariffs canceling their allowances to these tap lines of the lumber companies; the cancelation became effective May 1, 1912. The Commission, in the decision just cited, authorized this cancelation. The Commerce Court enjoined the action of the Commission and the case went to the Supreme Court.

So by the middle of 1912 the Commission had two irons in the fire, the Arbuckle case and the Tap Lines case, and was preparing another iron: namely, the Industrial Railways case. These railways served manufacturing plants and were given allowances upon the same theory as the tap lines. In 1913 the Supreme Court began its record of blocking the Commission in its procedure. It sustained the injunction of the Commerce Court with regard to Arbuckle. The ground for the Supreme Court's decision was that in delivering its own and other goods the Arbuckle company was performing a service which the railroad would otherwise have to perform itself and that it was properly paid by the railroad therefor.

12. *Opinions of the Supreme Court on tap lines and industrial railroads.*—In 1914 the Supreme Court delivered its second decision unfavorable to the Commission, in its decision on the tap lines. The Court decided that these tap lines which, of course, in addition to carrying lumber, carried goods for merchants in the lumber towns, were common carriers and so were entitled to be treated as such by the other railroads; and that the real railroads could make no distinction in their arrangement with the tap lines between traffic belonging to the tap line's owner and traffic belonging to others. The only consolation which the Commission could get out of the decision was the statement of the Supreme Court that the Commission by its control over rate divisions could prevent any exorbitant allowance being made to the tap line, as such allowance would be in the nature of a rebate to the lumber company that owned the tap line. In this respect the Supreme Court said (234 U. S. 1, 29):

> Because we reach the conclusion that the tap lines involved are common carriers, as well of proprietary as non-proprietary traffic and as such entitled to participate in joint rates with other common carriers, that determination falls far short of deciding, indeed does not at all decide, that the divisions of such joint rates may be made at the will of the carriers involved and without any power of the Commission to control. That body has the authority, and it is its duty, to reach all unlawful discriminatory practices resulting in favoritism and unfair advantages to particular shippers or carriers. It is not only within its power, but the law makes it the duty of the Commission, to make orders, which shall

nullify such practices resulting in rebating or preferences, whatever form they may take and in whatsoever guise they may appear. If the divisions of joint rates are such as to amount to rebates for discriminations in favor of the owner of tap lines, because of their disproportionate amount in view of the service rendered, it is within the province of the Commission to reduce the amount so that a tap line shall receive just compensation only for what it actually does.

In 1914, before this Supreme Court decision had been rendered, the Interstate Commerce Commission had launched a third attack along the same lines. This attack was in the Industrial Railways case. The industrial railway, which in general was operated by the locomotives of the company to which it belonged, sometimes carried a small amount of freight for persons other than the plant owner, in order to retain the appearance of being a common carrier.

The Commission decided (29 I. C. C. 212) that all allowances to or divisions of rates with any of the so-called industrial roads were unlawful. No order was issued, but the line-haul carriers promptly withdrew all allowances, divisions, demurrage and per diem arrangements with the industrial roads that were under discussion by the Commission in that proceeding.

Then followed the Supreme Court's decision in the Tap Lines case, whose fundamental principles were not different from those involved in this Industrial Railways case. Upon petition of certain of the industrial railways, the Commission suspended the cancelations by long-haul carriers of joint arrangements

with the industrial roads. The Commission then, in November, 1914 (I. C. C. 32, 129), issued a supplementary report on the Industrial Railways case. The Commission said:

> We think that in the light of the decision of the Supreme Court in the Tap Line cases it is our duty to so modify our findings in the original report herein as to permit the trunk line roads, if they so elect, to arrange by agreement with any of the industrial roads mentioned in our former report which are common carriers under the test applied by the Supreme Court in the Tap Line cases, and which perform a service of transportation, for a reasonable compensation for such service in the form of switching charges or divisions of joint thru rates.

Moreover, in accordance with the decision of the Supreme Court in the Tap Line cases, the Interstate Commerce Commission allowed such divisions to lumber tap lines as had prevailed before May 1, 1912, to be reinstated, except that the Commission fixed the maximum divisions of rate or switching allowances which the tap line roads might receive from the trunk line carriers. It would really seem that the exercise of the Commission's power over rate divisions was sufficient to prevent any considerable discrimination in favor of an industry owning a tap line or an industrial railway.

13. *Commission reversed by Supreme Court.*— The Supreme Court has thus blocked the Commission in four attempts to dislocate railroad operations—or accessorial railroad operations—from ownership of the goods involved in those operations. It might

seem that the so-called "commodities clause" of the Interstate Commerce Act, aided by the Hepburn amendment of 1906, had some bearing upon this situation. The "commodities clause" reads (Section 1 of the Act):

> From and after May 1, 1908, it shall be unlawful for any railroad company to transfer from any state, territory, or the District of Columbia, to any other state, territory or the District of Columbia, or to any foreign country, any article or commodity other than timber and the manufactured products thereof, manufactured, mined or produced by it, or under its authority, or which it may own in whole or in part, or in which it may have any interest, direct or indirect, except such articles or commodities as may be necessary and intended for its use in the conduct of its business as a common carrier.

In the first place, the Supreme Court in 1910 (213 U. S. 366) so interpreted the commodities clause of the Hepburn Act as to render it almost powerless. This was the case of the United States versus the Delaware and Hudson Company. The Court held that "the ownership by a railway of stock in a bona-fide corporation manufacturing, mining, producing or owning the commodity carried, is not the interest, direct or indirect, in such commodity forbidden to the carrier by the statute." Moreover, in the Tap Line and Industrial Railways cases, and also in the Arbuckle case, the commodity company was interested in the railway, not the railway company in the commodity.

REVIEW

Compare terminal charges and services on grain at the ports of New York and Boston, respectively.

Explain the operation of "distress room" on ocean steamers as a factor in making New York desirable as a grain exporting point.

Explain the operation of "demurrage charges" and the purpose of the "average demurrage" agreement. What changes in demurrage has the Director General instituted?

Distinguish between the various kinds of belt lines.

Describe the origin and course of the Arbuckle sugar case before the Interstate Commerce Commission, and the Court.

Outline the decision of the Interstate Commerce Commission in the Tap Line case and the Industrial Railways case.

CHAPTER XIII

TERMINAL SERVICES AND CHARGES IN NEW YORK

1. *Extent of New York's shipping district.*—For several reasons the terminal operations and charges at New York City are of wide interest. A large part of the export, import and coastwise business of the country is handled thru the port of New York and, because of the great domestic shipments, it enjoys an excellence of railroad service which, combined with the exceptionally liberal terminal services performed free by the New York railroads, has gone far to give New York its industrial supremacy.

The following discussion can best be followed by reference to the accompanying map of "Rail Terminal Facilities in New York," published by the Merchants' Association of New York in connection with a pamphlet setting forth the attractions of New York for iron and steel industries.

It will be noted that the shipping district of New York consists of five main divisions:

(1) The Island of Manhattan, separated by the Harlem River from

(2) The Bronx; by the Hudson or North River from

(3) New Jersey; by the East River—a continuation of Long Island Sound—from

(4) Brooklyn, on Long Island; and by the waters of New York Bay from

(5) Staten Island.

None of the railroads, excepting the New York Central, reaches Manhattan Island with rails over which freight may be shipped. The New Haven shares with the New York Central a passenger entrance into the Grand Central Terminal and, for passenger trains, the Pennsylvania has an entrance into New York.[1] But so far as freight is concerned, the trunk lines, excepting the New York Central, terminate on the New Jersey shore, while the New Haven terminates at Harlem River in the Bronx, and the Long Island Railroad at Long Island City.

2. *Rate competition at New York terminals.*—In spite of the fact that only the New York Central reaches Manhattan Island—and it has a freight line extending far down toward the lower end of the Island, at St. John's Park—the lower end of Manhattan, below 14th Street, is still the destination and origin of most railroad freight carried to and from New York. In this area are the wholesale and warehousing establishments of the city, the commission merchants and the light manufacturing concerns. This district was established as the city's commercial center in the days before railroads were built. The New York Central, early in the history of railroading, built its line down the west side of Manhattan to

[1] Since the Government took the roads, the thru trains of both Lehigh Valley and Baltimore and Ohio have run into the Pennsylvania's 32nd Street terminal on Manhattan.

this business district. The New York Central gave to Manhattan a rate from the West determined by the competition of the Great Lakes and the Erie Canal. The lines terminating in New Jersey charged as much for bringing western freight to Jersey City as the New York Central charged for bringing it to Manhattan; both acts of transportation were simple all-rail hauls of about equal length. The New Jersey roads, in order to reach Manhattan Island, had to float their freight across from the Jersey terminals, but they could not charge the shipper for the cost of this floatage. The New York Central stood ready to deliver in Manhattan at the New Jersey rate, and if the Jersey railroads were to do any Manhattan business, they also had to deliver at this rate. That is, they had to stand the cost of floating freight from the Jersey terminal to lower Manhattan.

3. *Lighterage facilities.*—But this was not all. The Erie Canal was in competition with all of these trunk lines for western business. It was a matter of indifference whether the canal boat unloaded its freight on Manhattan Island, the Bronx, Brooklyn, Staten Island or the New Jersey shore. It delivered freight anywhere in this area at the flat New York rate. The railroads were forced to meet this situation. That is, without charge they floated or lightered carload freight between their terminals and points on a very wide stretch of shore that came to be known as "lighterage limits." That is, the flat New York rate applied to all points within these

lighterage limits, and a situation was created which remained even after the Erie Canal ceased to be a serious competitor of the railroads. The competition of the railroads with each other, as they were played off against each other by shippers and real estate owners, induced them to extend these lighterage limits until, at the present time, the limits in some places are 26 miles apart.

No one knows what it really means to have a "water front" location until he sees the use made of New York harbor as an industrial belt line. Nothing has so greatly contributed to the growth of New York as has free lighterage. All a New York industry has had to do has been to build a wooden wharf and, as it had a carload of freight to ship or receive, order any New York railway to take or deliver that carload, by one of its lighters, at that wharf. The harbor waters were made a belt line and such they remain.

Lighterage charges in New York are not absorbed in the case of nearby points. For instance, the rate from Newark to New York is 3 cents per hundred pounds higher than the rate to Jersey City, the extra 3 cents providing for lighterage. But on all roads rates to and from points beyond the zone about 150 miles inland from the Hudson River include "free lighterage." [1]

The harbor waters of New York should be conceived of as a belt line, over which, by means of

[1] See note, bottom of page 229. See also New Jersey's demand for a lower rate than New York because of the cost of this lighterage (page 266).

lighters and car floats, the various sections of the New York shipping district send and receive freight, and over which is managed the exchange of freight between different sorts of carriers.

4. *Rates enjoyed by New England carriers.*—The New England carriers reaching New York City are in a different position. They have no Erie Canal barges carrying export freight there and delivering it upon equal terms anywhere in the harbor. So carload freight from Boston and Albany and Boston and Maine points is delivered anywhere within lighterage limits at 2 cents per hundred pounds above the rate applying to freight for local New York delivery. The local rate applies only to freight delivered in cars, without breaking bulk, in Manhattan or the Bronx. The New Haven, for making these lighter deliveries, adds 3 cents to the New York rate, except from New England points reached also by the Boston and Albany or Boston and Maine, for which the lighterage is, by competition, already fixed at 2 cents.

5. *Necessity for owning railroad piers.*—The early method of lightering freight between Manhattan Island and freight terminals of the New Haven and the Jersey roads has been largely replaced by a more convenient form of delivery, which avoids the rehandling incident to lighterage. The roads terminating on the New Jersey side of the Hudson (also the New York Central with that part of its freight which cannot be handled by its low-capacity surface line),

as well as the New Haven and the Long Island, serve Manhatten by car floats, upon which, early each day, cars are towed alongside piers on the Manhattan water front. The cars, still standing on these floats, are then unloaded. In the afternoon the cars are loaded, the floats towed back to the Jersey shore and the cars pulled off and put into out-bound trains. It is not sufficient to have one pier or group of piers on the west side of Manhattan. The warehouses of one branch of trade are located near the Battery; those of another set are up near Christopher Street, a mile away. The dry goods retailing district, with huge receipts by rail, has moved up towards 42nd Street.

So each railroad system, for competitive reasons, must own railroad piers, and by car floats make delivery on the west side of the water front from near Christopher Street, near the Battery and near 42nd Street. Moreover, other consignees may prefer delivery on the upper or lower east side water front, in the Bronx or in Brooklyn, both above and below the Brooklyn Bridge. Competition between the roads has compelled each one to make delivery, at the New York rate, to terminals at each of these points. The consignee has his choice of all deliveries.

6. *Advantages of docking in Manhattan.*—Because of the free lighterage given to rail freight in New York, a steamship line can dock anywhere within lighterage limits and be upon a belt line—the harbor waters—over which all railroads except those from New England will deliver carload freight to any point

at the flat New York rate. This explains why most of the steamship companies dock on Manhattan Island, while the railroads over which their goods are to be forwarded terminate in New Jersey. People often wonder why New York steamship lines do not dock at Jersey City piers on which tracks can be run. Manhattan Island is a better location at which to deliver and receive local New York (Manhattan) freight, as well as passengers. It is as good as New Jersey for interchanging freight with the New Jersey rail carriers. The steamship would have freight put alongside the ship no more cheaply if it docked at a pier in New Jersey, even if the New Jersey pier had direct rail connections with all the Jersey roads, for the rate to the Jersey shore is the same as the rate which includes lighterage alongside a ship docking in Manhattan. Moreover, it is a positive advantage for the steamship lines to be located away from the New Jersey shore so that they do not have railroad tracks encumbering their piers. Most export freight never touches the pier of a New York steamship line. It is brought by the railroad alongside the steamship on lighters and taken by the ship's tackle overside. The pier is thus kept free for local freight and passengers. Similarly, import freight, in carload lots, hardly goes upon the pier. It is discharged from the steamer and generally trucked across the pier, which merely serves as a transfer platform, to a railroad lighter waiting on the other side. It is cheaper for the steamship company to swing freight on board

from a lighter alongside than to truck it from the pier floor to the edge of the pier and there hoist it aboard.[1]

One of the great wastes in the New York terminal service has been contained in the duplication of lighterage service. Each railroad has its own lighterage equipment. By its tariff it engages to lighter, without charge, any full carload of freight sent to it. The average carload of freight is somewhere between 15 and 20 tons. The lighter can carry from 300 to 800 tons. It would be an obvious saving if the railroads would pool their lighterage equipment, and route the lighter around among the various railroad piers until it had accumulated a full load for delivery to a steamship or any other destination. The railroads themselves would save a great deal of money thru this process, and it ought to be possible to do lightering more cheaply for the shipper, in cases where the shipper pays for it. Moreover, the clutter of individual lighters around each steamship would be replaced by a smaller number of full lighters in the joint railroad service. To a very large extent lighterage in New York harbor has thus been pooled since the Government took the roads. The principle is the same as that which has driven the railroads in New York to adopt "store-door delivery" for solving the problem

[1] After the entrance of America into the war, and especially after the Government took the roads, there was an increase of loading direct from Jersey pier to ship, partly due to the single-headed control of routing export shipments and the huge movement of bulk goods in full cargo lots.

of the congestion of drays around the railroad freight stations. (See page 275.) The lighterage evil has been further ameliorated by the railroad administration's control of routing, making it possible to have freight for a steamer reach the seaboard over a single carrier in full train loads and hence in full lighter loads.

7. *Lighterage on export and import freight.*—Carload export freight is shipped to New York billed "lighterage free for export." Such freight is held without storage charges for 5 days (export flour 10 days) in a lighterage shed of the railroad over which it arrives. Before that period is up, the steamship probably calls upon the railroad company to deliver the freight alongside in a lighter. The steamship company calls for each consignment of railroad freight to be delivered at the time which fits in with its demands for properly stowing the vessel. Under railroad tariffs, an L. C. L. shipment of export freight may be put in the same car with the "lighterage free" carload and, if destined for the same boat, for delivery at the same point and at the same time, will be granted free lighterage.

On carloads of east-bound "lighterage free" freight (except lumber) three free export lighterage deliveries will be made from any one car. All additional lighterage deliveries from the same car will be subject to a charge of 3 cents per hundred pounds, with a minimum of $6.00 for each delivery. (On domestic freight only one delivery will be made without the

levy of this extra charge.) There is a charge of $2.00 per car on freight (perishables) placed in storage and later forwarded to shipside for export.

Carload import freight is similarly lightered free by the railroad from the ship's pier to the railroad terminal, where the freight is put into cars and sent to destination. L. C. L. shipments of west-bound freight, which is "lighterage free" in carloads—for example, import freight—is granted free lighterage if it is received along with a carload or more of "lighterage free" freight from the same shipper, at the same point, at the same time.[1]

In cases where the shipper desires it, freight which is "lighterage free" in carloads will be delivered or collected by cars on car-floats without extra charge where there is a minimum of 6 carloads offering.

8. *Transfer costs absorbed at some ports.*—In New York there is no absorption of the cost of transferring L. C. L. *exports* between railroad and steamship lines. There is such absorption at Boston, Philadelphia and Baltimore. Such an L. C. L. export shipment comes to that New York pier station of the delivering railroad which is nearest to the steamship line in question. The L. C. L. shipment comes in a regular merchandise car composed of assembled L. C. L. from the point of origin to that particular pier station in New York.

[1] Again, all this refers to normal times. Under war-time regulations, no export shipment could be sent to the seaboard without an export license and a shipping permit, generally not granted unless ocean freight space had already been engaged on a steamer with an early sailing date.

From the pier station, the L. C. L. must be drayed to the pier of the steamship line. The cost of this draying is an expense in addition to the inland and the ocean rate. This draying will be performed by the railroad company's draymen for a normal charge of 5 cents per hundred pounds, which is increased by 50 per cent, and sometimes more, in cases where the steamship dock is a long distance from the nearest delivery station of the railroad.

The provisions in New York applying to the L. C. L. *imports* are not exactly the same. On import freight brought from European ports and on unmanufactured tobacco in packages, L. C. L. from Cuba and Mexico, destined to Buffalo or points west of Buffalo, the railroad absorbs cartage charges from shipside to railroad station up to a maximum of 8 cents per hundred pounds when the revenue is equal to third-class rates or better to destination; and 4 cents per hundred pounds when the revenue is the same as, or less than fourth-class rates to such point. On all other import L. C. L. the railroad makes no teaming allowance.

9. *Port discrimination at New York.*—In June, 1917, New Jersey interests brought suit against the carriers terminating on the Jersey shore of New York harbor. They complained of rate discrimination, because the whole Port of New York was considered by the railroads as a single rate point. New Jersey sought a lower rate than the New York side of the harbor—lower by the cost of the floatage and lighter-

age necessary to serve Manhattan, Brooklyn, and the Bronx. In December 17, 1917, the case was decided against the New Jersey contention. New York continued as a single rate point and the floatage and lighterage services were considered by the Commission to be analogous to switching operations in other large centers, which are considered as rate units even tho the cost of serving various parts of such localities may be widely different.

10. *Agencies for handling freight.*—Each railroad in New York maintains a foreign freight agent who attends without charge to the getting of an ocean bill of lading for the shipper and to the getting of the shipper's freight on board ship. A large proportion of our carload export freight, in normal times, is so handled, at the seaboard, by the foreign freight agent of the railroads. However, the larger shippers are tending to have their own export representatives, or export organizations, in New York, to whom export shipments can be consigned. Such men are able to give much more attention than the foreign freight agent of a large railroad can give to the prompt transference and clearance of the shipments of this particular company, to the draying of its L. C. L. export and import shipments, to the making of necessary declarations to the custom house officials regarding the value of the exports, to the clearance of imported goods thru the customs, to the getting of the complicated consular documents necessary to accompany a shipment to certain foreign countries, particularly to

Latin America, and to the purchase of marine insurance for the shipment.

Forwarders play a considerable part in the L. C. L. export and import business. A forwarder with an agency in Chicago collects the L. C. L. shipments of many exporters, forwards them in a carload lot and, as has been described, gets the whole lot of L. C. L. the *carload* rate applying to the highest class shipment therein. Part of the saving in freight rates thus afforded is given to the shipper. The forwarder makes his money from the part which he retains out of the saving of freight rate, and also from a charge which he makes for representing the shipper in the various operations and formalities, already described, necessary at the seaport. There are other agencies sometimes called forwarders, but usually freight brokers or customs brokers, who confine their activities to representing the shipper at the seaboard. A far larger rôle is played by the true "forwarders" in Germany than in the United States because of the great difference between the tariff on L. C. L. freight and the low carload rate on miscellaneous freight when consolidated in Germany.

11. *Origin of the Bush Terminal.*—No description of the terminal operations and charges in New York would be complete without a consideration of one of New York's unique features, the Bush Terminal Company. The Bush Terminal Company had its origin in the days when the congestion due to concentrating more and more warehousing, wholesaling and

manufacturing concerns on Manhattan Island south of 14th Street began to be felt keenly. The concentration of shippers and receivers of freight in this area proceeded far more rapidly than railroad facilities could be extended. Railroad facilities depended upon the possession of piers. But the number of piers along the water front was strictly limited, and coastwise and oversea carriers competed with the railroads in the demand for these piers. As a result, the number of cars which the railroads have been able to load in and out of this district could not be increased to any considerable extent.

The result of this situation has been a daily congestion and delay at the limited "bulkhead" receiving platforms, adjacent to the piers, where the railroads could accept freight for shipment. Because of this congestion and delay, and the practical impossibility of having one team deliver shipments to more than one railroad pier-station in the course of an afternoon, the cost of draying between manufacturing or warehousing establishments and the railroad pier stations became very high. Moreover, most of the buildings in this lower section of Manhattan were of an old type and the insurance rates on goods manufactured in them were high. Also, rentals were necessarily high on the highest land values on the American continent.

These three elements, high rentals, high insurance and high drayage costs incident to business concerns in lower Manhattan, are what induced Mr. Bush to establish his Bush Terminal in South Brooklyn.

Heavy industries, such as foundries, long ago deserted Manhattan Island because of its high land values, in favor of New Jersey and particularly for adjacent Long Island, where the labor market is good. But the manufacturers and proprietors of warehouses of high class goods that move L. C. L. would not leave the city. They needed to be adjacent to the freight stations of the railroads on the west-side water front, where each road daily loads a hundred cars of L. C. L. thru to destination.

12. *Services rendered by the Bush Terminal.*—Mr. Bush met the situation and drew even these people away from Manhattan. He induced them to consolidate themselves in his huge loft buildings. He thus consolidated their L. C. L. shipments, all of which he handled for them. He was thus enabled to obtain the minimum of L. C. L. tonnage and to load many daily thru cars to important interior points. In any case, Bush loads daily straight cars of L. C. L. to each New York railroad transfer station on the Jersey water front or just inland from it. These cars may be loaded by Bush up to 12 o'clock noon; by 12 o'clock night they have been put at the transfer station into thru cars to destination and are on their way to the interior.[1]

The Bush Terminal was made possible by the policy of the New York railroads to float cars to Bush's

[1] Since the Government took the roads there has been no such rivalry in getting west-bound Manhattan freight thru the Jersey transfer stations. Such freight is now delayed 24 hours going thru the transfer.

float bridges, free of charge, and deliver them alongside the loft building where he wanted them; or rather, they pay Bush a compensation reimbursing him for performing this service with his own rolling and floating stock. The New York rate delivers the car alongside the manufacturer's shipping platform exactly as if he had his buildings in Jersey City. He is, as it were, located in a joint freight station of all railroads serving New York. The manufacturer in a Bush loft building trucks his freight off the manufacturing floor into a freight elevator. Bush, acting as terminal agent for the railroad, then gives the manufacturer a bill of lading thru to destination.

The success of Mr. Bush has induced the New York Dock Company and at least two other concerns to imitate him; the movement has only begun. We may expect to see the decentralization of high-grade manufacturing and warehousing in greater New York, exactly as we have seen the decentralization of the heavy industries. This will mean the removal of operations from dark and unsanitary quarters to commodious loft buildings. The heart of a city is no place for manual laborers to work. The land is too valuable. No one can afford to give them enough room. The interior city is the place for mercantile and financial business. But light manufacturing industries are held here because of the impossibility of finding exterior situations accessible to labor and with convenient freight stations of all railroads. These roads were all built to reach the central section and from

it they diverge, so that an exterior situation is as a rule dependent upon connection with a single road.

Altho this is the main, it is not the only feature, of the Bush Terminal. In addition to serving as a location for light manufacturing industries, the Terminal serves as a warehousing center for distributors who can avail themselves of the numberless lines of transportation which radiate from New York, oversea lines, coastwise lines and railroad lines. The Bush Terminal has a large number of docks at which ocean steamships are accommodated. It used to be said that import freight at New York was discharged at Manhattan, warehoused in Brooklyn, and shipped from New Jersey, and it was said that the devil himself, if he had devised a system, could not have devised a more unhandy one. The Bush Terminal aims to eliminate this waste motion. Import freight landed on a pier is easily and quickly transferred to a warehouse directly behind the pier, and when the time for interior shipment comes, the goods are shipped in a railroad car that comes alongside the warehouse.[1]

It should not be too readily assumed that the Bush Terminal development is capable of imitation everywhere. It ought to be already clear that it was devised to meet the peculiar situation at New York, and would be successful elsewhere in proportion as the

[1] As a war measure the Government took much of the Bush plant as a "war base", or war exports concentration point. It commandeered piers, warehouses and part of the equipment of industrial buildings, and it spent $44,000,000 in building additional pier and warehouse space adjacent thereto.

situation there approximates the situation in New York.

13. *War increases congestion.*—The heavy movement of merchandise freight to and from New York City, in 1917-18, due to the stimulation given by the war, made still more unendurable than formerly the congestion at the railroad pier stations on the borough of Manhattan. Freight arriving at those stations was unloaded upon the pier sheds and lay there until called for by the consignee who was sent an "arrival notice", causing an inevitable delay of 24 hours in taking the freight away. The shipper was then allowed 48 hours "free time" before he was penalized for not removing his shipment.

As a matter of fact, there is a great congestion of private drays at the piers (the inward freight stations) each morning, the teams representing firms which received their arrival notices the day before, each team eager to get its freight the first thing in the morning. A shipper's trucking equipment spends its mornings fighting for an opportunity to get on the piers and bring away inward freight, and spends its afternoons standing in line waiting for a chance to deliver outward freight at the railroad's receiving stations.

The railroad out-bound freight stations are the "bulkhead" or shore sheds adjacent to the piers. Each railroad which leases a pier also leases the adjacent bulkhead sheds extending half the width of each slip next to the pier. Each carfloat carries two

rows of six cars each, the cars lying opposite each other across a fixed trucking platform on a level with the car doors. The platform at the carfloat's inner end is connected by a gangway with the bulkhead shed. Similarly, short gangways connect car doors with corresponding doors of the pier sheds, where inward freight is discharged.

The morning congestion upon the railroad piers is repeated at the bulkhead receiving platforms in the afternoon. Every shipper holds his dray back until the last possible moment lest by any chance a telegraphic order be received from a salesman or a customer, too late for the order to go on the dray. So the shippers' teams and auto trucks throng about the railroad stations at from two to four in the afternoon. There are long lines of waiting teams extending up West Street (the water front street) and far into the nearby side streets. The limitation upon the handling capacity of the receiving station is the length of the bulkheads of the sheds facing the streets. Only a given number of teams or trucks can discharge there, at one time.

For the last ten years there has been a tremendous growth in the freight business of New York City, with almost no growth in the capacity of its railroad freight stations. As many piers and bulkhead sheds as could be spared were assigned to the railroads ten years ago. The water front piers must also be used by coastwise and oversea lines. The supply of piers is constant, the demand of the railroads for piers to

meet the increasing traffic thrust upon them is growing—the disparity arising between these factors has constantly increased congestion.

14. *How "store-door delivery" operates.*—The assumption by the railroads of trucking from and to shippers and consignees, was an obvious solution in organizing the street traffic serving the piers. It meant concentrating upon full railroad auto trucks the driblets of freight brought or distributed by a multitude of drays, perhaps only a few boxes or cases on each dray. Under "store-door delivery", the inward railroad freight, immediately upon being unloaded from cars, would be put into railroad auto trucks, each truck designated to take the freight of a single shipper or enough shippers to assure a full truck load. There would thus be no piling up of freight upon the piers, no delay due to the sending of "arrival notices" or the waiting of consignees to call for their shipments.

Thus, in the morning, the railroad auto trucks would distribute freight. In the afternoon, they would call for it, each truck being assigned a route and serving all shippers upon that route. The unorganized rush of private drays for the outward freight stations in the afternoon, would thus be replaced by the regular scheduled arrival of full auto trucks. It was perfectly apparent that the system would greatly increase the handling capacity of the freight sheds, remove congestion, and that it would also reduce the cartage bill of the shippers and consignees. It was of course proposed to add a reason-

able charge to the flat New York rail rate, in constructing the "store-door delivery" rate.

This is the system employed in England. It was developed there because, in the great British centers, this problem of congestion at the city freight stations arose much earlier than it did here. In England the shipper can do his own draying if he chooses; in that case he is quoted a "station to station" rate, including no railroad charge for trucking. For example, on a certain commodity the rate from London to Manchester, "store-door delivery", is 30.7 cents per 100 pounds; the corresponding "station to station" rate is 20.8 cents per 100 pounds. It is obvious that approximately 10 cents per 100 pounds, in this case, are added for cartage at each end of the rail haul. In England most shippers take advantage of the delivered rates; as a rule, only those shippers whose commodities require a specialized form of handling or trucking service, do their own delivering or collecting from the freight stations. It should be noted that in England there are none but "station to station" rates quoted upon sand, brick, lime, coal, iron ore, and other coarse freight.

The railroads have long thought of this solution of the problem of New York freight congestion, but refrained from adopting it for several reasons. In the first place, no railroad cared alone to brave the wrath of great shippers with their own developed teaming service, and the wrath of the teamsters, highly organized in New York. The railroads have long since

ceased competing in rates, but they have competed all the more fiercely in service. It has been impossible to get them to unite in any sort of joint action with regard to the elimination or improvement of antiquated terminal conditions in New York City. Added to their constitutional disinclination to cooperate, was the fear that the Sherman Law would get them if they did cooperate. Finally, the roads had a strong fear that, if they instituted "store-door delivery", the Interstate Commerce Commission would tell them to render that service without being allowed to charge for it.

When the roads were commandeered by the United States Government, these difficulties were all removed. To all intents and purposes, there was one railroad system left. It did not fear the Sherman Law. It knew quite well that the Government, which had taken over the roads under guarantee of their previous net income, would not add an extensive terminal service without charging for it. Competition for freight was abolished.

15. *Trucking situation in New York and proposed remedies.*—Director General McAdoo assigned James S. Harlan of the Interstate Commerce Commission to make a study of the trucking situation in New York City and recommend a remedy. He recommended a remedy which was a half-way stage between the old order of individual trucking and complete store-door delivery.

Mr. Harlan recommended that the part of Man-

hattan Island south of 59th Street should be considered as a drayage district. No notice of arrival was to be given to the consignee of any freight arriving at a pier within the drayage district, nor could he in the future call for his shipments. Delivery of such freight was made only by registered truckmen, under direction of the draying director. Such truckmen were to be wholly under his control, and he would arrange not only for the use of their equipment, but also for bonding them to insure their responsibility. The plan was to have a battery of registered trucks on each pier, each morning as the freight was unloaded. Each truck would be loaded full of freight for consignees within a common zone.

Apparently shippers were to be allowed to deliver their out-bound freight just as before the plan was put into effect. But it was expected that this consolidated delivery of inward freight would be followed, before long, by a consolidated collection of outgoing freight, either because shippers would perceive the advantage of the practice, or because the draying director would extend his supervision to cover outgoing freight as well. The drayage director was empowered to issue rules and regulations covering such matters as the method of making delivery to consignees, the charges to be assessed, etc. Conferences with representatives of the shipping public were expected to slightly modify this plan, but it was to go into effect essentially along the lines described.

Store-door delivery has been discussed in detail

because, without doubt, if it is successful and economical in New York, it will be introduced in other large centers of the country. The need is the same everywhere. K. M. Nicholas, Chairman of the San Francisco Car Service Committee, early in 1918 made a three-day check on L. C. L. delivered by trucks at San Francisco freight stations. The deliveries were as follows:

From 7 A. M. to noon	29 per cent
From noon to 2 P. M.....	15 per cent
From 2 P. M. to 4 P. M.....	56 per cent

He reported that if freight could be delivered earlier, the roads could not only get it out of the city more promptly, but they would have more time in waybilling and loading, with consequent greater efficiency in safeguarding goods from being damaged or going astray.

Store-door delivery is something which every shipper needs to have in mind, in making his future plans. It should be stated that it has been in operation not only in England but also in many cities of Canada, for example, Toronto and Winnipeg.

REVIEW

Describe the five main divisions of the shipping district of New York, and tell how each is served by the Jersey railroads.

Describe the connection between the Erie Canal and the present lighterage situation at New York.

Distinguish between the New England railroads and the trunk line railroads in their practice regarding "free lighterage."

Describe the method of interchange between railroads and steamships at the port of New York.

What do you believe to be the advantages of store-door delivery?

Give some of the remedies proposed to alleviate the trucking situation in New York.

CHAPTER XIV

EXPRESS AND PARCEL POST

1. *Extent of the express business.*—The origin of the express business was in a carpet bag which a man named Harnden carried between Boston and New York, in which he transported valuable parcels. Harnden and Adams, who instituted competitive services over the same route, later combined to form the Adams Express Company. Wells and Fargo combined their express services on the lines of the New York Central with certain other interests to form the American Express Company. They later went west and instituted the Wells Fargo Express Company, which was one of the principal organizations in the country until July 1, 1918, when it was consolidated with other companies.

Our express companies operate more than 300,000 miles of line. The total mileage of the leading companies of the country, as reported in the 1917 Report of the Interstate Commerce Commission, was as follows:

Adams Express Company	45,165.92 miles
American Express Company	74,972.36 miles
Canadian Express Company	12,049.93 miles
Great Northern Express Company	9,629.42 miles
Northern Express Company	8,294.45 miles

Southern Express Company	34,748.60 miles
Wells Fargo & Company	118,218.40 miles
Western Express Company	5,256.32 miles

2. *Relation of the express company to the railroad.* —On July 1, 1918, the American Railway Express Company, a merger, was formed. Under separate operation by the individual companies the relation of the express company to the railroad had been as follows:

The primary business of the express company is to engage in the transportation of commodities upon passenger trains. Each railroad company has an exclusive contract with an express company to which it grants the sole right of transportation on its line. The railroad's compensation for this is a percentage of the gross receipts of the express company, which is fixed in the contract and is determined by the density of population and cost of terminal service. For example, the American Express Company pays the Boston and Maine only 42 per cent, while it pays the Union Pacific 55 per cent of its gross express receipts.[1]

The railroad supplies and carries enough express cars to handle the business which the express company may develop. The original carpet bag has developed not only into special express cars, but into

[1] Express traffic is denser in the East than in the West. But the heavy costs of maintaining team delivery organizations in the East make its business relatively less profitable. It will be seen, later, that the I. C. C. allows an express company to charge only 10 cents per package for collecting or delivering.

solid express trains. The railroad company leases to the express company quarters on the railroad premises and the railroad company carries employes of the express company free upon its trains. The express company relieves the railroad company from all liability for damage to the express company's employes or to goods transported by express.

3. *Express company organization.*—The express company has an organization that is not unlike the traffic organization of a railroad. Below the executive officers are heads of departments: traffic, accounting, operating. In the operating department are general managers, each in charge of a territory. Each territory is marked off into divisions, under division superintendents. The division superintendents exercise a general supervision over agents in their respective divisions and send out route agents who act as traveling supervisors of the agencies and also as traveling solicitors of business. Local offices are managed by station agents with authority over cashiers, clerks, and other employes. In the less populous sections of the country, railway agents act as express agents and are paid not salaries but commissions on the business they handle. Express messengers are in charge of express cars in motion.

4. *Services other than transportation performed by express companies.*—While its main business consists in the transportation of commodities between points in the United States, including a pick-up and delivery service at either end of the transportation route,

there are other important functions which the express company performs. One of these is the carriage of merchandise between the United States and foreign countries. From an American railroad a shipper to a foreign country can receive a thru bill of lading only to a foreign port. An American express company will give a thru bill of lading to any desired interior point. The express company charges him the actual transportation rates which it must pay, plus a fee for the services of its agencies or connections at ports in this country and abroad, or interior places abroad. Moreover, the shipper of small packages abroad can profit by the use of the express company. Steamship companies usually have a minimum rate of $5.00 for each shipment. The express company can allow the small shipper a lower rate than this on a small package and yet make money by consolidating small shipments in the space for which it has contracted on the vessel.

The express company will transport not only merchandise but money, securities, jewels and precious stones, and assume unlimited liability therefor upon payment of a proper insurance for the risk. The company issues money orders and collects drafts both in the domestic and the foreign trade. It operates an "order and commission department", which purchases or sells for the account of its clients. In order to further the business of the order and commission department, the express company prepares and distributes

lists of shippers and buyers in various commodities, particularly produce.

5. *Express business brought under the control of the Interstate Commerce Commission.*—In 1906, the domestic merchandise traffic of the express companies was made subject to the Interstate Commerce Commission by the Hepburn Act. This subjection of the main business of the express companies to regulation by the Interstate Commerce Commission was the first result of a long agitation in criticism of exorbitant rates of the express companies and in favor of the establishment of government parcel post service. The second result was the new set of express rates prescribed by the Interstate Commerce Commission in 1912; and the third result was the establishment of the government parcel post system on January 1, 1913.

In 1906, the Commission was given the same power over the express companies as over the railroads. It can prescribe the forms of accounting for the express companies, fix maximum rates, subject to court review, and make rulings regarding unfair or unlawful discriminations. Express rate schedules must be filed with the Commission and lawful notice of changes given. The 1910 Mann-Elkins Act added, for express companies as well as railroads, the requirement that the provisions of the long-and-short-haul clause should apply to express rates, and thru rates should not be greater than the sum of local rates. That is,

in general, the express companies are treated as common carriers.

6. *Express rate revision.*—It was not until 1912 that the Commission had investigated the work of express companies with such thoroness that it was ready to order a revision of their rates. Its order was based largely upon a comparison of the express rates with first-class railroad rates, which showed that the express rates were inordinately high. Moreover, the Commission was convinced that express company profits were out of all proportion to the amount of money that had been invested in the property actually required to conduct its transportation business. The Commission's summary of its 1912 decision with regard to express companies is worth reprinting because it gives the principles upon which the express rate structure today is based. The Commission decision and order read, in abstract (24 I. C. C. 381):

1. Express rates should be made primarily to meet the need of the great body of our people and should therefore be stated in terms that represent the small packages which the express company is intended to carry rather than by the hundred pounds, as freight rates are stated.

2. In the fixing of its rates an express company should not be allowed to charge more than a railroad company if the latter undertook to, and did give the same service.

3. It is proper for the government to treat the express company as a freight forwarder by passenger train, giving supplemental service at each terminus and intermediate care.

4. An express rate may not be based upon the monopoly right of the express company to be the exclusive freight forwarder over one or more lines of railroad.

5. The rate should not include more than a reasonable

compensation for the service given, even tho such compensation falls below that which the railroad expects as a minimum for the carriage of one hundred pounds of freight.

6. It is unreasonable to fix as rapid a decline in express rates for long distances as is made by the railroads in their freight rates; express service in this respect being more analogous to passenger than to freight service.

7. In compounding the express rates, the railroads should be allowed a compensation for bulked freight moved upon a passenger train, as to which it is relieved by contract for all liability for loss or damage, and is without expense for the furnishing of a receipt, the billing, the bookkeeping, and the great number of other general expenses.

8. The rates should include a return to the express company which will compensate it with profit for the expense of the service which it gives, there being added thereto in the formation of the total rate the proper charge which it may reasonably make for the service which the railroad gives, as stated in the preceding paragraph.

9. The Commission makes the following general findings and requirements: (a) A new and simple method of stating rates by which one who is not an expert in the reading of traffics may know what rate he should be charged. (b) The tariff must present but one rate upon the same class of traffic between any two points in the United States served by the same carrier. The rebates by indirection concealed in the tariffs must be removed. (c) There must be a new classification of traffic in which the standard or first-class rate shall be that on merchandise, and to which there shall be one great class of exceptions—a second class, as it were—consisting of articles of food and drink now carried under the meaningless term of "general specials." The rate for this latter class should bear a relation in percentage to the former. Our conclusion is that 75 per cent of merchandise [1] would yield a fair and reasonable rate. Other rates may be made to meet traffic needs and develop industry, but all such rates shall be based on conditions of service and should, for

[1] The merchandise rate.

convenience, likewise be stated in percentage of the merchandise scale. (d) The rules of the express companies are too many and too involved. They need very drastic revision. (e) The express carriers must unite in direct thru routes, reaching all cities and towns accessible to each other by the shortest route measured in time. The Commission will leave this matter in the hands of the carriers for the present, but will see that this principle is recognized in the routing of express traffic. (f) There should be a precise statement published and filed showing the terminal service that is given at local stations. (g) To avoid prosecutions for illegal overcharges it is essential that double collections shall cease, and to this end a system of labels is herein described—a yellow label, which shows that the charges have been paid; a white label, when the charges have not been paid; and if no label is carried on the package, it must be delivered without charges and the error later corrected. (h) The standard merchandise rates have been found to be discriminatory as between localities and unreasonable in themselves with respect to the points dealt with in our order. They have been the product of an unregulated growth, in which certain of the larger cities have gained an undue advantage and preference. A burden that is excessive and unjustifiable has rested upon the packages of smaller weights which the express carrier was specially created to transport. The railroad company's "farming out" this branch of its service upon a percentage contract basis has created an inevitable tendency to increase parcel rates. There has been no uniformity in the application of any system or basis, or scale of rates with reference to points similarly situated even within the same territory and no reasonable relation is suggested in the rates fixed between the service given by the railroad in the carrying of a parcel than that given by the express company in its terminal service.

10. In order that the shippers and carriers may have abundant opportunity to analyze the rates and rules proposed herein and present their views to the Commission before they go into effect, the order herein will require the

carrier to show cause on October 9, 1912, why the proposed rates should not be put into effect.

7. *Effect of regulation of express rates.*—The new system prescribed by the Interstate Commerce Commission would, it was estimated, provide a reduction of 15 per cent of express gross revenues. The corresponding decrease in net revenues would, of course, be much larger. The Commission divided the country into over 950 blocks, formed by intersections of parallels of latitude and meridians of longitude. The length of these blocks is in every case 69 miles, while the width varies from 45 miles in the north to 62 miles in the south. Each block is divided into 16 squares, from A to Q omitting J. The country is again divided into five great zones, according to the density of traffic in each. Zone 1 is the territory east of the Mississippi and north of the Ohio, roughly corresponding with Official Classification territory. Zone 2 is Southern Classification territory. Zone 3 is the territory west of the Mississippi to the Rocky Mountains. Zone 4 is the intermountain territory, and Zone 5 comprises the states bordering on the Pacific. Two tables are used to find the rates between blocks. One is a so-called "main block tariff", which gives the rates between each block and other blocks that are not adjacent; the other is the so-called "sub-block tariff", which gives the rates between the block in question and adjacent blocks.

In making the tariff the Interstate Commerce Commission took into account the following elements:

first, a fair express terminal charge which, for all zones, was figured to be 20 cents per shipment or 20 cents per 100 pounds when the shipment exceeded 100 pounds; second, a fair rail terminal charge, which was figured at 25 cents for each 100 pounds or a proportionate amount for weights under 100 pounds; third, a fair railroad charge for hauling the shipment which, for the first 50 miles, was figured at 15 cents per 100 pounds, and a proportionate amount for weights under 100 pounds, in Zone 1; 20 cents in Zone 2; 25 cents in Zones 3 and 5, and 70 cents in Zone 4. The haulage allowance was reduced by one-quarter cent for each succeeding 50 miles, the minimum rate per block in each zone being reached at 21 blocks. The minimum charge per 100 pounds, thus computed, is 60 cents in Zone 1, the lowest minimum; and $1.15 in Zone 4.

The rates described are, of course, the maximum rates that can be charged, but lower rates are in fact applied by the express companies to all "merchandise" carried short distances, say 75 miles or less.

Under the order of the Interstate Commerce Commission all articles of food and drink are carried at 75 per cent of the above rates. Special commodity rates are granted to facilitate the movement of products of the soil from producing points to markets. As in the case of freight rates, these commodity rates bear no particular relation to the express merchandise rate structure which has been described and which corresponds with the class rate structure of the railroads.

It should be noted that while the computations of the Interstate Commerce Commission as to the cost of giving express service are based upon the unit of 100 pounds, the rates which the Commission prescribed are based upon the actual weight in pounds, and the tariffs so read. The reduction which the Commission ordered on small packages was particularly severe. The prescribed rates went into effect on February 1, 1914. After a year's experience with these rates, the four principal express companies, which do approximately 95 per cent of the express business of the country, filed a petition for a modification of the order which would readjust the basis of the class rates on packages weighing less than 100 pounds. The companies estimated that if this modification were granted, their gross revenue would be increased 3.86 per cent. They showed that the number of shipments handled had increased 2,250,000, but the gross transportation revenues fell off $13,680,810 per year. The Commission granted the increase. Indeed there was need for relief. For the year ending June 30, 1914, the operating income of the twelve principal express companies in the country was $404,529, compared with $4,413,459.85 in the previous year. In the year 1914, the United States Express Company incurred a deficit of $572,906.36, and on June 30, 1915, went out of business. The Globe Express Company went out of business on April 30, 1915.

Drastic economies on the part of the other express companies, aided by the slight rate increase already

mentioned, temporarily helped them out of their difficulties. The operating income of the ten principal companies for the year ending June 30, 1915, rose to $2,575,478. Then followed the war situation in American industrial life, causing extraordinary advances in the cost of operation.[1] Again the companies were reduced to no profit in the year ending June 30, 1917. On December 1, 1917, they made an application to the Interstate Commerce Commission for a flat increase of 10% in the charges on all shipments. The report filed with the Commission showed that the four large companies, for the first seven months of 1917, lost $508,527; that is, they paid out for operation and taxes just that much more than they received in cash for the transportation performed. For labor alone in 1917 they were to pay out $37,900,000, 24 per cent more than for the same period of 1916.

This application for an express increase rate of 10 per cent was granted, the 10 per cent applying on both intrastate and interstate shipments. The new charge went into effect July 15, 1918. But, on account of the war situation, labor and material costs continued to advance in such proportions that this

[1] The Du Pont Powder Company furnished an interesting illustration of the manner in which war business sometimes aided the express companies. When one of the company's powder plants at Wilmington was blown up, it was necessary, because of war contracts, to rebuild it with all possible speed. The lumber had to come from New England. It happened that at the time there was a very heavy freight congestion at the gateways leading from New England to the South. It would have taken at least two weeks to get the lumber by freight. The Du Pont Company ordered it sent on by express. The company paid express rates of $430 per car for 26 cars of this lumber.

advance in gross revenues was soon absorbed and a further increase necessary. Accordingly, the Director General of railroads—followed by the Interstate Commerce Commission—authorized additional rate advances as follows:

In Zone 1	
First Class	16 cents per 100 lbs.
Second Class	12 " " " "
Commodities	10 " " " "
All Other Zones	
First Class	11 " " " "
Second Class	8 " " " "
Commodities	10 " " " "

These rate increases were effective in December, 1918. It was figured that they would produce approximately $12,000,000 annually in revenue.

On July 1, 1918, the American Railway Express Company was organized to take over the services of the principal American express companies. The merger was formed at the request of the Director General of Railroads, to assume all express business on Government-controlled lines. At least for the period of the war, the American Railway Express Company was to conduct the business formerly handled by the companies enumerated on page 281.

The new corporation has a capital stock of $40,000,000, the shares subscribed by the old companies and paid for with cash or property. They were allowed to turn in their property at $30,000,000. The companies agreed to get rid of all contracts, as

far as possible, excepting those with railroads under the control of the Director General. Any controversy as to the performance of any part of the contract must be submitted to the Interstate Commission.

Under the agreement between the United States Railroad adminstration and the American Railway Express Company, the company gives to the Government 50.25 per cent of the gross receipts from the express business. All other arrangements between the express company and the railroads continue practically the same as prior to Government control of the carriers. Division of the net profits of the express company between the company and the Government *after* five per cent (cumulative) is paid the company, is regulated on a complicated profit-sharing basis.

Since July 1, 1918, shippers were ordered to direct shipments "by express" without regard to the individual names of the express companies. About 125,000 employes of the old companies were retained under the new corporation, and their wages raised. The president of the American Railway Express Company thus described the economies he was effecting, immediately after they went into operation:

> Already the vast terminals maintained by the various companies are being unified by a practical saving of time and transfer. The street equipment of between 30,000 and 40,000 motor and horse vehicles is undergoing a redistribution to avoid duplication of routes. Branch agencies and multiple offices in many cases have been subjected to an economic readjustment.

8. *Plan of the parcel post system.*—After a long, hard fight led by Representative Lewis of Maryland, Congress on August 24, 1912, passed an act authorizing the establishment of a domestic parcel post system. There had long been in effect a parcel post system in connection with foreign countries. Beginning with January 1, 1913, the post-office accepted for domestic delivery parcels of fourth-class mail matter, not exceeding 11 pounds in weight and not greater than 72 inches in length and girth combined. Fourth-class matter was defined as including all matter not embraced in first, second and third-class mail classifications; that is, merchandise, farm products, seeds, bulbs, miscellaneous printed matter, etc.

Considering any point in the United States, all other points are in one of eight established zones. The first zone is an area within 50 miles of the shipping point; the second zone, 150 miles; the third zone, 300 miles; the fourth zone, 600 miles; the fifth zone, 1,000 miles; the sixth zone, 1,400 miles; the seventh zone, 1,800 miles; the eighth zone, all the rest of the United States. The rates vary between 5 cents for the first pound and 1 cent for each additional pound or fraction, applying to the first and second zones; and 12 cents for the first pound, with 12 cents for each additional pound or fraction, applying to the eighth zone. Parcels delivered on the same rural delivery route or in the same city where they are mailed, have a rate of 5 cents for the first pound, and 1 cent for each additional 2 pounds or fraction.

9. *Development of the parcel post system.*—Since the system was established, certain modifications have been made. The use of distinctive parcel post stamps has been abolished. At first parcels were not insured. We can now insure parcels up to $50 value (5 cents for the first $25, 10 cents for $50). On July 1, 1914, a C. O. D. system was adopted. The parcel post will collect the value of merchandise up to $75, but transportation charges must be prepaid. Moreover, the weight limit on parcels in the first three zones has been raised to 70 pounds, and in the other zones has been increased from 11 to 50 pounds. Books were reduced from third to fourth-class and were thus entitled to the privilege of movement by parcel post.

The parcel post service is now handling something like 800,000,000 parcels annually.[1] A reduction in

[1] A test made by the Postmaster-General, October 1 to 15, 1915, showed that from fifty of the largest post-offices, 75 per cent of all parcels forwarded weighed sixteen ounces or less. This included the millions of packages which always moved by mail under the old rate of one cent per ounce. Therefore the number of packages moving as parcel post now cannot be classed as indicating new business of the mails. A very large percentage of the present parcel post always moved in the mails under the old fourth-class mail rate of one cent per ounce up to four pounds—four pounds being the limit of weight that would be accepted. Now the post-office carries this business at a charge of one cent per ounce up to four ounces; above that weight the low parcel post rate applies. So far, therefore, as this business is concerned, the parcel post has not added to the post-office's traffic; it has simply decreased its revenues.

An illustration will indicate the extent to which the parcel post is used for small shipments. If a shipload of coffee comes in from Brazil, the broker to whom the shipment is consigned takes samples of the coffee and mails them in small packages all over the country, soliciting bids. He always used to distribute these samples under the old fourth-class mail rates.

1913 of the cost of insuring parcels increased this branch of the business from an annual average of 5,000,000 to 13,000,000 insured parcels. In the first years of the C. O. D. service, 3,000,000 parcels were handled in this manner and over $14,500,000 collected. Finally, there is a regulation permitting a shipper to send a number of small parcels bulked together, by freight or express, addressed to any post office within his first or second zones. The post office will then sort out the shipments and forward them by parcel post.

10. *Parcel post system in practice.*—The opposition to the introduction of the parcel post was by no means confined to the express companies. The small merchants in country towns were afraid of the increased competition of the mail-order houses. Their fears have been justified, as is witnessed by the tremendous rise in Sears Roebuck business and Sears Roebuck stock in the last three years. Parcel post competition has been a severe blow to the railroads. It has taken traffic out of express cars, from which the railroads formerly received reasonably large revenues, and put it into postal cars, from which they get unreasonably small revenues. Until November 1, 1916, the railroads were paid on a weight basis for carrying the mails. Once every four years the mails on different routes were weighed and averaged for a

The average weight of all parcels forwarded from the fifty largest post-offices from October 1 to 15, 1915, was only one pound and six ounces. (See printed report of Postmaster-General Burleson to the Committee on Post-Offices and Post Roads, dated April 1, 1916.)

period of one hundred days. This average weight was paid for by the government at a rate fixed by Congress for the entire four-year weighing period. Any increase in mail matter, meantime, was carried free until the next weighing. On November 1, 1916, the so-called Moon Law changed the basis of payment to a space payment—so much per mile per linear foot of railroad mail cars required, with an additional allowance for terminal expense. Yet this arrangement was only temporary. The same Moon Law charged the Interstate Commerce Commission with the duty of finally determining the basis of compensating the railroads for carrying the mails. The Commission has already given its consent for placing more than 90 per cent of the mail transportation on a space basis.

There is plenty of room, even yet, for both express and parcel post services in this country. A marked advantage of the express service is that the express company collects and delivers parcels, whereas the parcel post only delivers them. Furthermore, the express company gives a receipt for the shipment it takes. The express rates include insurance (up to a value of $50 per package), whereas insurance must be paid in addition to parcel post rate. Packages sent by express may be insured to any amount; packages sent by parcel post may not be insured for more than $50. Express insurance guards against damage or partial loss, whereas the government insurance in the parcel post includes insurance only against total loss. For this reason, many merchants using

the parcel post take out "blanket" insurance with a private company, which covers all their shipments. Express packages are forwarded under the protection of sealed trunks, while parcel post packages go forward in mail sacks. Only the express company allows the privilege of shipping collect, with privilege of examination of C. O. D. shipments, when authorized by the shipper.

The block express rates and the zone parcel post rates work out in such a way that the parcel post is, in general, cheaper for light packages and for short distances, while the express is cheaper for heavy packages, and, often, for light packages over long distances.

For the guidance of shippers, compilations are published which show comparative express and parcel post rates from large centers to destinations all over the country. For example, the National Shippers' Association publishes such a guide for New York City.

It is interesting to note that the major advantage of the parcel post system goes to interior centers, but particularly Chicago. Draw a circle of 1,500 miles with New York as a center. Half the area is at sea, and the 1,500-mile circle does not reach beyond the Mississippi River. Chicago's 1,500-mile circle reaches the Gulf and the Atlantic.

Most of the advantage of the parcel post, moreover, has gone to large cities. In 1916, over 70 per cent of the parcels mailed emanated from the 50 larg-

est cities in the country, while only 17 per cent of the parcels carried were received at those same cities.

REVIEW

What relation exists between the express company and the railroad?

How are express companies organized? What services other than transportation do they perform?

To what extent is the express business controlled by the Interstate Commerce Commission?

What has been the effect of Commission regulation of rates on the express companies?

In shipping packages which could go by either express or parcel post, which method would you use and why?

CHAPTER XV

THE INTERSTATE COMMERCE ACT

1. *Early lack of supervision.*—In the early days of railroading, the carriers' activities were practically unrestricted. Attempts to fix a maximum for their charges were rarely made. Even when a maximum was fixed by law, it was generally related to the old road tolls or canal tolls, and therefore much higher than the rates which the railroads of their own accord charged. Publicity of rates was not generally required and no attempt was made to provide against discrimination. In those days, not only were the railroads given a free hand in fixing the prices they charged, but communities and states vied with each other in the granting of subsidies or aids to railroad construction, and inducing Congress to supplement such aid by land grants or bond guarantees of its own.

The first railroad rate legislation was the so-called "granger legislation" in the West, primarily Wisconsin, brought about by farmers who blamed the transportation companies for the low prices of grain. The strict state laws which were passed resulted in stopping railroad development in those states, and were soon repealed. Instead of rigid laws, state railroad commissions were created, entrusted with the regu-

lation and control of rates and practices within each state. Some of these commissions even exercised the power to initiate intrastate rates, and the United States Supreme Court held that the exercise of such power was lawful, and reserved for itself only the right to pass upon such commission orders as were confiscatory of the property of the carrier in violation of the Federal Constitution.

2. *Origin of Interstate Commerce Act.*—However, the state commissions had no control over interstate rates, since that was reserved by the Constitution to the Federal authorities. Interstate traffic came to be infinitely more important than the business moving within the borders of one state, and there was a rising demand for a Federal law regulating that traffic. The law was passed in 1887, the Interstate Commerce Act. Its primary purpose was to prevent the railroads from making arbitrary discriminations in their rates, favoring one person over another or favoring one locality over another. The abuses which made the Federal law necessary were most clearly brought to the public attention in three reports—the report of the Windom (Congressional) Committee in 1874, the report of the Hepburn (New York State Legislative) Committee in 1879 and the report of the Cullom (Congressional) Committee in 1886. The original act of 1887 has been repeatedly amended, because it has been found necessary to confer upon the Interstate Commerce Commission, entrusted with the enforcement of the Interstate

Commerce Act, constantly larger powers of control over railroad rates and practices.

3. *Application of the Act.*—The Act applies to carriers in the interstate transportation of persons, property or intelligence. Designated as such carriers are railroads, rail-owned water lines, telegraph, telephone and cable companies, pipe lines, express and steam car companies.

The Commission's main concern, of course, has been with the railroad carriers of freight. The following summary deals primarily with provisions of the Act affecting freight shipments.

First, the Commission is charged with supervision over the transportation of the country and is granted broad rights to investigate the books of carriers, prescribe the form in which those books are kept, revise rates found to be unjust, unreasonable or discriminatory, and exercise a similar control over railroad practices.

All transportation charges must be found just and reasonable and this policy is also demanded of all classifications, regulations and practices. The most frequent ground upon which a charge is declared unjust and unreasonable is that it represents an unfair discrimination as compared with a rate granted to another shipper or traveler under similar circumstances, or granted to another place, or granted to another commodity. Less frequently a rate is declared unreasonable because it is out of proportion to the cost of the service which the carrier renders.

4. *Act forbids discrimination.*—Discrimination between shippers is forbidden by stern penalties prescribed for carriers that grant to any individual or any shipment, transportation at rates lower than those advertised to the general public by the railroad carrier. Special rates, rebates, draw-backs and all other devices of the sort are forbidden. However, the carriers are allowed to grant lower rates or fares, or free transportation, for certain individuals or shipments such as objects of charity, ministers of religion, property transported to and from agricultural fairs, etc.

The Act likewise forbids discrimination among commodities. A shipper has cause for complaint if his commodity is assessed with a higher classification rating than another commodity of approximately the same value and which occasioned to the railroad the same cost of transportation.

Discrimination among places can be charged when towns A and B about equally distant from C, are charged different rates for transportation to C. Likewise, if A and B have the same rates to C, in spite of the fact that A is only one-half as far from C, A can generally charge discrimination. A thru rate may not exceed the sum of the intermediate rates. The worst violations against the principle of non-discrimination among places are those that have been remedied by the long-and-short haul clause of the Act, in Section 4. Without specific approval of the Commission, the railroad cannot now charge less for

a long haul than for a short haul, the short haul being included within the long haul.

The delicately balanced rate structures of the country are largely the result of an attempt to provide for rates so related as to avoid discrimination between commodities and places.

5. *Railroad service is prescribed.*—The Interstate Commerce Act also prescribes a large measure of control over railroad service. Upon reasonable request it is the duty of every carrier to provide and furnish transportation such as that described in the Act. Upon proper terms a carrier must construct switch connections with the private side tracks of shippers. Every carrier shall furnish a car for the movement of traffic "to the best of its ability without discrimination in favor of or against any shipper." In an emergency, a shipper can apply to the United States Circuit or District Court for a writ of mandamus commanding a recalcitrant carrier to haul and transport his interstate traffic and to furnish cars and facilities for him.

6. *Commission's control of tariffs.*—Every charge or practice of a common carrier must be in accordance with a tariff, to be constructed in accordance with the orders of the Interstate Commerce Commission. One copy of the tariff must be filed with the Commission and a copy must always be available for a shipper to inspect. That is, in every place where freight or passengers are received for transportation, a file of railroad freight and passenger tariffs apply-

ing to that place must be kept. In addition, each station must carry the name of the railroad agent to whom the shipper may apply for a written statement of the rates.

Since 1917 it has been unlawful for carriers even to file with the Interstate Commerce Commission tariffs carrying rate advances until such filing has been approved by the Commission. No tariff so filed can become effective in less than 30 days unless the Commission specifically allows a shorter period. Rate schedules which do not carry "an effective date" are automatically rejected. The effect of any other tariff may be suspended by the Commission, pending investigation, for a period of four months and then for a subsequent period of six months, ten months in all.

But the Commission may not only pass upon rate changes proposed by the railroad. The Commission may itself initiate rate changes and make rate reductions, after full hearing, either upon complaint as to the rates on the part of shippers or state railroad commissions, or upon the Interstate Commerce Commission's own initiative. The Commission may then prescribe just and reasonable individual or joint rates and charges, individual or joint classifications, regulations and practices.

7. *Commission controls relations between carriers.* —The Act gives the Commission a large measure of control over the relations between carriers themselves. It may prescribe thru and joint routes over connecting carriers, subject to the important modifications

that no railroad shall, against its will, be made party to a joint route that embraces less than the entire length of its line lying between the terminals of such a proposed route. A carrier must construct and operate, upon reasonable terms, a connection with any "lateral, branch line of railroad" which desires to connect with it. If the participants in a thru route cannot agree upon the division of rates between them, the Commission may prescribe that division. Railroads may not exercise undue preference between connecting lines with which they interchange traffic. The pooling of freights and the division of earnings between competing railroads is forbidden. A common carrier issuing a bill of lading and paying to a shipper a claim for damaged freight, may collect the amount of that damage from the connecting carrier which caused it.

There are a number of provisions designed to compel cooperation between rail and water carriers. The Commission may enforce the establishment of physical connection between the lines of a rail carrier and the dock of a water carrier. The Commission may establish thru routes and maximum joint rates over such combined rail-and-water routes. The Commission may establish maximum proportional rates by rail to and from the ports where traffic is interchanged with such a water carrier. If a railroad carrier grants thru bills of lading in connection with an ocean carrier operating between the United States and a foreign country, the Commission may compel

the railroad to grant such thru bill of lading in connection with any other ocean carrier. If a railroad reduces rates to kill off water competition, it may not increase rates when that competition has disappeared. Railroads may not own parallel water carriers unless specifically authorized by the Interstate Commerce Commission to do so.

8. *Control of carrier's relations with non-carriers.* —The Act prescribes the relationship between the railroad and persons or corporations who are not carriers in certain instances. The Commission may determine a railroad's payment for services rendered by a shipper. As a matter of fact, such payment—for example for operating a grain elevator—may not exceed the cost of the service rendered plus a bare profit; otherwise the payment might constitute a rebate. The so-called "commodity clause" of the Act forbids a carrier in interstate commerce to transport any commodity produced under its authority "except such articles or commodities as may be necessary and intended for its use in the conduct of its business as a common carrier." (The Clayton Anti-Trust Act forbids a carrier to purchase securities or supplies from a corporation with which it has a director or officer in common, provided such purchases aggregate more than $50,000 in one year.)

The Act empowers the shipper to prescribe the routing of his freight in cases where two or more thru routes to destination apply. It is unlawful for a carrier to give any information concerning the nature,

kind, quantity, destination, consignee or routing of any property tendered or delivered to it. This protects the business secrets of shippers. The Act sets forth in detail the railroad's liability for the safe carriage of passengers and freight, which is very extensive.

The Interstate Commerce Commission prescribes the form in which railroad accounts may be kept and it is unlawful to keep accounts in any but this form. In addition, the Commission requires certain monthly and annual reports and statistics from the carriers and these figures are made the basis of the Commission's own annual report to Congress and are found in its annual volume of railway statistics.

9. *Court decisions and the Commission.*—Court decisions, particularly the decisions of the Supreme Court on contested points, have tended to define more sharply the powers which the Interstate Commerce Commission may exercise. The Supreme Court has established a principle that the judgment of the Commission as expressed by its order cannot be reviewed by the court in so far as these orders are within the Commission's delegated authority, are not confiscatory, and not palpably arbitrary and unreasonable. There is no redress against an order of the Commission if it is based upon a thoro examination of the facts, if it does not compel the railroad to give service below cost, and if the imposition of its particular terms is within the power of the Commission as delegated to it by the Interstate Commerce Act.

10. *Initiating complaints.*—"Any person, firm, corporation, company or association or any mercantile, agricultural or manufacturing society or other organization or any body in politics or municipal organization or any common carrier" may complain of a violation of the Interstate Commerce Act. The Commission shall forward this complaint to the offending carrier, who is called on to make reparation within reasonable time, specified by the Commission. If reparation is not made, the Commission begins investigation of the complaint if it seems reasonable. Such an investigation may likewise originate on the Commission's own motion, or it may result from a complaint of State Public Service Commissioners.

The Commission is free to determine its own method of procedure, in investigations. It may require testimony in documentary evidence and compel witnesses to testify, tho such testimony makes immune from criminal prosecution. After full hearing, the Commission may enter an order prescribing rates, routes, practices, reparation for damage done. Reports of decisions must be furnished to complainant and defendant, and the Commission may also print its decision for wider distribution. The Commission may, when it chooses, grant or order a rehearing and may modify its previous orders.

It should be noted that any person or persons wishing to complain under the Interstate Commerce Act may take the complaint before a United States Circuit

or District Court, instead of before the Interstate Commerce Commission.

11. *Enforcement of Commission's orders.*—If any of the Commission's orders is not regarded by a carrier—except an award of damages—the Commission may apply to any United States District Attorney to prosecute the carrier in a Federal Court under direction of the Attorney General of the United States. If the Commission's award of damages is not observed, the injured party may prosecute in the United States Circuit Court to obtain the damages awarded, as well as costs.

12. *Appeals from orders.*—Appeals from orders of the Commission may be entered by the carrier in the United States District or Circuit Court. In 1910 the Federal Commerce Court was established to expedite reviewing or enforcement of the Commission's orders. Even at the outset the new court persisted in straying beyond the proper functions of a court of review, as laid down by the Supreme Court. The Commerce Court seemed to want to review the facts of the case as well as the law. The Court, in 23 of 27 cases submitted to it, reversed the Commission. The Commission found itself hampered in the exercise of its power and, as time went on, the Supreme Court sustained the Interstate Commerce Commission and reversed the Commerce Court in a growing number of cases. As a result, the public received the impression that the Commerce Court was acting in

the interests of the railroads. That sentiment crystallized into the abolition of the Commerce Court by Congress. The Commerce Court judges were distributed among the United States Circuit Courts and the review and enforcement of the Commission's orders returned to the scattered Federal Courts.

13. *Penalties provided by the law.*—Heavy penalties are provided for those convicted of violating the Act, both carriers and shippers. If an officer or agent of any carrier is found guilty of doing or permitting to be done a thing in contravention of the Act, he shall be subject to a fine not exceeding $5,000 for each offense. If the offense is an unlawful discrimination regarding fares or charges, the person shall also be liable to imprisonment in the penitentiary for two years. Any person or any agent of a corporation dealing with the carriers, is liable to a fine of $5,000 or two years' imprisonment, or both, for accepting advantages forbidden in the Act, or for attempting bribery of a carrier.

14. *Other laws affecting carriers.*—The Commission is charged with administering a number of Federal laws which affect railroad construction and operation, but not rates, and hence do not directly concern the shipper. Such is the Safety Appliance Law, the Boiler Inspection Act, the Hours of Service Act, the Transportation of Explosives Act.

In addition, there is a multitude of state laws affecting grade crossings, safety devices and hours of labor. There are state "full crew" laws determining

the number of employes that must be on trains of different lengths, laws stipulating the minimum age for telegraph operators, regulating the use of intoxicants by train men and a hundred other matters. Not infrequently the zeal of State Legislators results in peculiar laws. A classic example was a bill that came before the Kansas Legislature, providing that if two trains were to meet at a grade crossing, both should stop and neither should proceed until the other had gone by.

15. *Organization of Commission.*—The central office of the Commission is at Washington, tho it may hold hearings anywhere. The number of Commissioners, originally five, was increased first to seven and later to nine. When the membership of the Commission was increased to nine, it was authorized to act thru sub-divisions. Accordingly it divided itself into three divisions of three members each. Each division has power and authority to hear, determine, order, certify, report and in general carry out the functions formerly held by the full Commission. As an additional unburdening of the Commissioners, much of the testimony, even in important cases, as well as tentative reports, are taken care of by special examiners whom the Commission appoints.

It has already been seen that the Commission is an administrative as well as a judicial body. Its administrative and clerical work is handled by a number of so-called bureaus; the bureau of law, the bureau of justice, the bureau of tariffs, the bureau of safety,

the bureau of locomotive inspection, the bureau of inquiry, the bureau of correspondence and claims, the bureau of valuation, the bureau of carriers' accounts, the bureau of statistics.

16. *Volume of work done.*—In the year ending October 31, 1918, there were 342 formal complaints filed with the Interstate Commerce Commission, a decrease of 309 compared with the previous year. During the same period 576 cases were decided and 77 dismissed by stipulation on the complainant's request. The Commission conducted 596 hearings and took approximately 105,000 pages of testimony.

In addition, many thousands of proposed tariffs were suspended by the Commission during the year, pending investigation. A great number of hearings were held at which the propriety of proposed rate advances was ascertained and passed upon. The Commission has perfected the machinery for administering the "Fifteenth Section Amendment" of August 9, 1917, compelling the carriers to get permission from the Interstate Commerce Commission before they even file the proposed rate increases.

17. *Special and informal dockets.*—Since 1906 the Commission, in addition to its formal docket cases, has had a so-called "special docket." This consists of a list of cases in which there is no dispute as to the facts, and which are submitted to the Commission for decision by the parties interested. Such cases are those which involve an acknowledged overcharge, in obvious disregard of the long-and-short-haul clause,

or cases where a thru fare or rate is greater than the sum of the intermediate fares or rates. In such cases the question is merely the amount of the reparation given to the complainant. The Commission requires the facts to be set forth with practically the same degree of thoroness as would prevail if the case went to trial. The Commission then renders its decision. The growth of this special docket, which began its development in 1906, is an indication of the increased efficiency of the Commission. For the year ending October 31, 1917, the carriers filed 4,883 special docket applications for authority to refund amounts collected in accordance with public charges which had been admitted by the carriers to be unreasonable. Orders authorizing refunds were issued in 5,059 cases.

The Commission also has an "informal docket" consisting of matters within its jurisdiction, which are taken up by the carriers by correspondence in an effort to secure adjustment or satisfaction of the complaint. During the year ending October 31, 1917, 5,300 such complaints were received and dealt with. The special docket and informal docket leave the Commission free to devote its energy to important cases, in which there is some real dispute as to the facts and the law.

18. *Conflict of state and national authority.*—The conflict between state and national authority is nowhere so apparent in this country as in the matter of railroads. The state has jurisdiction only over intrastate rates, for all control over interstate rates re-

mains vested in Congress, by which it is delegated to the Interstate Commerce Commission. A state, by prescribing low rates for intrastate traffic, can compel the carriers to make a heavy reduction of rates on interstate traffic, in order to avoid rate discrimination or violation of the long-and-short-haul clause. An excellent illustration of such reduction was given by the so-called Shreveport case, first passed on by the Interstate Commerce Commission in 1912, but not yet completely settled.

19. *Shreveport case.*—Shreveport, Louisiana, is forty miles from the eastern Texas border. The Texas Railroad Commission, with the frank object of monopolizing the Texas trade for Texas centers, prescribed a set of rates to apply between points within the state, much lower than the prevailing interstate rates. The result was that Shreveport could do almost no business even in the adjacent parts of Texas. For example, a rate of 60 cents carried first-class traffic a distance of 160 miles from Dallas, while the same rate would carry the same class of traffic only 75 miles into Texas from Shreveport. The first-class Texas rate from Houston to Lufkin, Texas, 118.2 miles, was 50 cents per hundred pounds, while the same rate from Shreveport to the same point, 112.5 miles, was 69 cents. The commodity rate on wagons from Dallas to Marshall, Texas, 147.7 miles, was 36.8 cents, while from Shreveport to Marshall, 42 miles, the wagon rate was 56 cents. The Louisiana State Railroad Commission complained before the

Interstate Commerce Commission that these rates were discriminatory against Shreveport.

The Interstate Commerce Commission, after a consideration of the facts submitted, found that the interstate *class* rates from Shreveport to certain Texas points were unreasonably high and it established maximum class rates to be substituted therefor. The established rates were substantially the same as the class rates fixed by the Railroad Commission of Texas and charged by the carriers. For Texas traffic, Western Classification was ordered to apply, just as in interstate traffic. The application of the Texas State Classification was thereby removed. The Interstate Commerce Commission further ordered the discrimination between interstate and intrastate commodity rates removed. It declared that *commodity* rates from Shreveport into Texas were unduly high compared with commodity rates between Texas points, and it ordered this discrimination removed, tho it did not prescribe the method of removal. The carriers were thus free to raise their intrastate commodity rates or lower their interstate commodity rates. They naturally elected to raise their intrastate rates. Texas protested and carried the case to the Supreme Court, which supported the Interstate Commerce Commission.

20. *Interstate Commerce Commission ranks state commissions.*—In 1916 there were further hearings before the Commission and it issued a supplementary order, renewing the original order and indicating that

it expected the carriers to remove the discrimination against Shreveport by increasing the intrastate commodity rates in Texas. The Commission said:

> In the absence of other requirements by Federal or state authorities, such an order could be complied with by increasing the Texas rates to the level of the interstate rates, or by reducing the interstate rates to the intrastate basis.
>
> Should the latter alternative be adopted, either voluntarily or under compulsion of the state authorities, the intrastate rates and regulations would be given extra-territorial force, and become the standard for interstate commerce.
>
> It can easily be conceived that if carriers, in removing undue prejudice against interstate commerce, were bound to follow the standards set by the state authorities, interstate rates, based in part on the requirements of one state and in part on those of others, would soon be in inextricable and intolerable confusion, productive of discord and ruinous alike to shippers and carriers.
>
> This, the commerce clause under which Congress has created this Commission and vested it with power, was designed to prevent.

That is, the Interstate Commerce Commission indicated that it devolved upon the railroads themselves to make an end of this process of state railroad commissions reducing intrastate rates to an unremunerative level and forcing reductions in interstate rates that may have very wide effects. The Texas rates have been raised accordingly. Later developments in the Shreveport case have resulted in orders of the Commission affecting rates between Shreveport and Western Texas, as well as between Shreveport and Eastern Texas, to which the original complaint applied.

It would be unfair to Texas not to state the Texas side of this case. Northern Texas centers, like Dallas and Fort Worth, in competing for the jobbing trade of Texas, had found themselves handicapped by the low inbound carload rates to Shreveport from the north. Shreveport is located on the Red River, a tributary of the Mississippi. Therefore, because of its location and the possibility of water competition via New Orleans and the Mississippi, it had lower rates from the east than any other point in the southwestern interior. Similarly, there was the theoretical possibility of water traffic from Kansas City and St. Louis to Shreveport, by means of the Missouri, Mississippi and Red rivers. Therefore, from Kansas City and St. Louis, there were lower rates to Shreveport than to Dallas and Fort Worth, which could offer no "potential" water competition. For example, it is 562 miles from Kansas City to Shreveport, and only 515 miles from Kansas City to Dallas. The carload rate on agricultural implements from Kansas City to Shreveport is $12.50 per ton, from Kansas City to Dallas, a shorter distance, $17.25. The carload rate on canned goods from Kansas City to Shreveport is $8.25 per ton, from Kansas City to Dallas $11.50. The Texas Railroad Commission undertook to offset this inbound discrimination by lowering the local rates within the state of Texas. The Interstate Commerce Commission said:

If Shreveport is so situated by reason of her position on the Red River and her proximity to the Mississippi that the

railroads serving her are justified in extending to her inbound rates which are lower than those extended to Dallas and other cities in Texas, it is her advantage, of which she may take full benefit. The carriers may not say that they will absorb in outbound rates such advantages as Shreveport has upon her inbound rates.

For seven years the Texas State Railroad Commission fought the Shreveport case, and the Interstate Commerce Commission's order was not accepted and in full force until 1918. The conflict between state and national regulation of railroads has been by no means finally solved. Its only solution apparently lies in eventually putting intrastate rates, as well as interstate rates, under the control of the Interstate Commerce Commission.

21. *Effect of Railroad Control Act.*—The Railroad Control Act of March 21, 1918, very seriously reduced the powers of the Interstate Commerce Commission during the period of war and the twenty-one months thereafter, the time during which the President shall control the roads. To be sure, Section 10 of the Railroad Control Act provides that:

> Carriers who are under Federal control shall be subject to all laws and liabilities as common carriers, whether arising under state or federal laws, or at common law, except in so far as may be inconsistent with the provision of this Act or any other act applicable to such Federal control or with any order of the President.

The Act empowers the President, who acts thru the Director General of Railroads, to initiate railroad charges independent of the Commission.

During the period of Federal control, whenever in his opinion the public interests require, the President may initiate rates, fares, charges, classifications, regulations and practices by filing the same with the Interstate Commerce Commission, which said rates, etc., shall not be suspended by the Commission pending final determination.[1]

22. *Commission's reduced power.*—It is true that after the President has exercised his power the Commission must upon complaint determine whether the rates initiated are in violation of the Act to Regulate Commerce. But the Commission has been reluctant to make such findings. In determining the reasonableness of rates as a whole, the Commission must by law take into consideration the certificate of the President that a rate increase is necessary to increase revenues in order to pay "railway tax accruals other than war taxes, net rents for joint facilities and equipment, and compensation to the carriers", in addition to the expenses of railroad control and operation fairly chargeable to railway operating expenses.

In brief, the Railroad Control Act, for the time of the war and the twenty-one months thereafter, abolished the following control which the Commission formerly exercised over railroad rates and practices: The railroads had to obtain permission to file tariffs;

[1] This power of the President was bitterly opposed by many shippers who insisted that rate changes should take their regular course before the Commission. They pointed out that the President may regulate imports, but not fix customs duties; and that the Postmaster-General may operate a postal system but not fix postage charges. Why, they asked, should the President, operating railroads, fix railroad rates? But Congress overruled such objections.

tariffs had to be on file thirty days before being effective; the Commission might suspend a tariff up to ten months, pending investigation; the Commission might require that a disapproved tariff be cancelled without going into effect.

23. *Effect of Railroad Control Act on state rates.* —The Railroad Control Act apparently gives the President authority to dictate intrastate as well as interstate rates. Therefore the Director General, in his general order 28 increasing the railroad rates in the country 25 per cent, made the rate increase apply to intrastate as well as interstate rates. In addition, he put into effect two measures which he could not maintain: He abolished state classifications, excepting Illinois classification, and substituted Official, Southern and Western classifications therefor; and he abolished all intrastate class rates in all cases where there were interstate class rates published between the same points. In a supplemental Order, these provisions were dropped because they were found obnoxious to the state commissions. However, the Director General's minimum rates on articles moving on class rates, were applied to intrastate shipments—in official classification territory, for example, ranging from 25 cents per hundred pounds for first class, to 10 cents per hundred pounds for fifth class.

As we have seen, the Director General has asked the states not to increase their previous rate of taxation upon railroad property. The Railroad Administration asked the various State Utilities Commissions to

allow street railroads within their jurisdiction to increase their interurban fares to three cents per mile, so that the Railroad Administration could get the full benefit of its corresponding fare increase. Mr. McAdoo also took over the former functions of State Railroad Commissions in passing upon the propriety of railroad stock and bond issues.

Finally, the Director General has seemingly taken away from the Interstate Commerce Commission the business of passing upon complaints as to rates and practices. The newly established freight traffic committees—regional, district and local—are supposed to pass upon complaints and suggestions of shippers, and changes in railroad schedules can come before the Interstate Commerce Commission only after the recommendations of the freight traffic committees have been adopted by the Railroad Administration, published and put into effect.

REVIEW

What brought about the passage of the Interstate Commerce Act and what was the main purpose of this legislation?

How does the Act treat discrimination between shippers and between places?

What changes in the filing of tariffs were prescribed by the Commission in 1917?

How are the orders of the Commission enforced?

How does the Commission divide its dockets so as to facilitate the disposal of cases?

Show how the Railroad Control Act has weakened the powers of the Interstate Commerce Commission.

CHAPTER XVI

INLAND WATER TRANSPORTATION

1. *Water transportation undeveloped in the United States.*—Inland water transportation in the United States has found its largest development on three waterways, the Great Lakes, the Erie Canal and the Mississippi River system.

The cost of hauling goods by water is cheaper than the cost of hauling them by rail. Yet we have little traffic on our inland waterways. Shippers feel that they are not getting from the waterways of the country, either inland or coastwise, the service which they should get nor the rates that should be allowed to them. This feeling crystallized into various pieces of Federal legislation designed to compel the railroads to cooperate with the waterways and divert traffic to them. Finally, the Federal Government, after assuming control of the railroads, established services on certain of our inland waterways which had become neglected.

2. *Traffic on the Great Lakes.*—The Great Lakes should be considered rather as inland seas, like the Mediterranean, than as an inland waterway. The standard bulk freight carrier upon the lakes has a capacity of 10,000 tons, which is equal to that of a large

ocean steamer. The traffic that moves upon the Great Lakes may be sharply divided into bulk traffic and package freight.

A large element of transportation upon the Great Lakes was formerly lumber, moving from west to east. The movement has by no means stopped, but has decreased with the cutting out of the timber areas in northern Michigan and Wisconsin. At the present time the principal eastbound bulk commodities are iron ore (60,000,000 tons annually) and grain (10,000,000 tons). Grain moves east chiefly from Duluth and Chicago, in the United States, and from Fort William and Port Arthur, in Canada, tho there is also a movement of winter wheat east from Toledo.

The bulk of the movement is spring wheat from Duluth, Fort William and Port Arthur. The general eastern destinations of this wheat are three—Buffalo, the Canadian Lake ports on Georgian Bay, and Montreal.

3. *Lake grain routes.*—The cheapest way to move this grain to a seaport, for exporting, is by the all-water route from the head of the Lakes to Montreal. The grain may move all the way from Fort William to Montreal in steamers drawing 14 feet; or it may move to Port Colborne (opposite Buffalo), in a larger steamer drawing 21 feet and carrying up to 400,000 bushels, and there be transshipped into a 14-foot steamer capable of passing thru the locks of the Welland and St. Lawrence canals. In either case, there is a normal summer rate from the head of the Lakes

to Montreal averaging 5 cents or less per bushel. Transfer to the ocean steamer at Montreal costs 0.25 cent. Lake insurance averages 0.6 cent per bushel, so the cost of putting Fort William grain on board a Montreal steamer is about 5.85 cents per bushel.[1]

The Grand Trunk has a normal summer ex-Lake route from its Georgian Bay ports to Montreal of 5 cents per bushel, including elevation of the grain at the Lake port and at Montreal. This puts Fort William grain on board the steamer at Montreal for about the following cost (pre-war):

Lake rate	1.25	cents
Lake insurance	0.30	"
Ex-Lake rate	5.00	"
Total	6.55	"

The cost of getting Fort William wheat on board a Boston or New York steamer is in normal times (pre-war) about as follows:

Lake rate	1	cent
Lake insurance	0.3	"
Ex-Lake rail rate	5.5	"
Elevation at seaboard	0.9	"
Total	7.7	"

The same rates would, of course, apply from Duluth, a short distance west of Fort William. The

[1] All these rates are those applying in normal times. The war completely demoralized lake rates, which were not, like rail rates, subject to regulation by the Interstate Commerce Commission, but shot up like other war prices in response to the law of supply and demand.

export rates from Buffalo east to Philadelphia or Baltimore are, it is recalled, 0.3 cent per bushel lower than to Boston and New York.

Obviously, unless there were some controlling factor outside the matter of inland rates, all American and Canadian grain moving out via the Lakes would be exported at Montreal. But the lack of elevator facilities at Montreal, the limitations of ocean tonnage at that port, the low rates offered by liners out of the American North Atlantic ports, have all tended to accentuate the lake-and-rail movement of American grain via Buffalo. As a matter of fact, most Canadian grain now follows the same route. This is indicated by the following table of exports of Canadian grain at Canadian and American ports, respectively, in the last years before the war:

EXPORTS OF CANADIAN WHEAT, IN BUSHELS, BY PORTS. 1911–1912–1913. 000'S OMITTED.[1]

	1913	1912	1911
Montreal	33,706	30,652	17,718
Halifax	287		
St. John	8,236	8,061	6,432
Portland [2]	8,223	5,763	3,440
Total Canadian	50,452	44,476	27,590
Boston	14,334	11,102	6,744
New York	22,216	22,631	13,862
Philadelphia	12,797	12,082	5,246
Baltimore	12,690	6,606	3,598
Total American	62,037	52,421	29,450

[1] From Clapp, "The Port of Boston", Yale University Press, 1916.
[2] Portland is the winter port of the Grand Trunk.

4. *Traffic in iron ore.*—The other large item of eastbound bulk traffic on the Lakes is iron ore. Some of it moves east from Marquette, Michigan, but most of it moves from the Minnesota mines via the ports of Duluth and Two Harbors, Minnesota. The largest of the ore-carrying fleets is owned by the Pittsburgh Steamship Company, a subsidiary of the United States Steel Corporation. The transportation of ore from the Minnesota mines to the blast furnaces around Pittsburgh, more than a thousand miles, is one of the striking examples of efficiency in transportation in this country. The United States Steel Corporation owns the railroad that runs from its Minnesota ore fields to Duluth. It owns the fleet of the Pittsburgh Steamship Company. It owns a harbor of its own at Conneaut, on Lake Erie. It owns the Pittsburgh, Bessemer and Lake Erie Railroad, which operates from Conneaut to Pittsburgh. The customary eastbound water rate on ore is, in normal times, 40–50 cents per ton. The eastern destinations of the ore are: Buffalo, Conneaut, Ashtabula, Cleveland and Lorain, Ohio—all on Lake Erie, and Chicago and Gary on Lake Michigan. Water transportation does not regard distance in the same way as rail transportation does. An illustration of this is found in the fact that ore rates are the same from Lake Superior to any Lake Erie port, tho the haul to Buffalo is 200 miles farther than to Toledo.

There is normally no westbound tonnage sufficient to refill the space which is occupied in the eastbound

boats, by ore, grain and lumber. Part of the space is filled by anthracite and bituminous coal. Anthracite coal is loaded mainly at Buffalo and Erie. Bituminous coal is loaded at Erie, Conneaut, Ashtabula and Cleveland. The destinations are Duluth, from which the coal is distributed in the Northwest; Chicago and Milwaukee, from which it is distributed in the central west. On account of the surplus steamship tonnage westbound on the Lakes, the rate on this coal per ton averages from 30 to 35 cents, probably the lowest transportation rate in the world.[1]

5. *Relation of rates on grain and ore.*—It is worth noting that the volume of ore so predominates on the Great Lakes that it determines the grain rate. If there is not a large movement of ore, the mere fact that there is a large movement of grain will not advance the grain rate because there will be a great deal of vessel tonnage free for hauling grain. When there is a large movement of ore and the vessel tonnage is fully employed for that purpose, the lake grain rate advances sharply, whether or not there is a heavy movement of grain.

The ownership of a large percentage of the vessels on the Great Lakes is in the hands of ore and coal men, who look on the grain-carrying trade on the Lakes as a side issue. This may account for the lack of progressive development of the means of handling grain on the Lakes thru American channels. Until

[1] The boats of the Pittsburgh Steamship Company do not stop to load coal west-bound but hasten back to Duluth for a fresh load of ore.

the summer of 1916, the elevators on the American side of Lake Erie were partly empty for years. The Canadians, on the contrary, who do not carry ore in their vessels to Canadian points, have improved their facilities for handling grain by the construction of the most modern elevators at Port Colborne, Montreal and Georgian Bay ports.

The transportation of package freight on the Great Lakes presents a different problem. Such freight is carried in regular package freight steamers. In this transportation, the main commodity moving eastbound is flour in sacks—westbound, manufactured products.

6. *Absorption of independent boat lines by the railroads.*—There was a time when most of these package freight lines on the Lakes were owned by independent companies. They arranged with railroad lines terminating at Buffalo, such as the Delaware, Lackawanna and Western, and the Lehigh Valley, to form thru rail-and-water routes between East and West. During the season of navigation, when the Lakes were open, these thru rail-and-water routes took away from the trunk line railroads, which ran thru Chicago, much more business than they cared to lose. In order to prevent such loss, the railroads acquired, one by one, the package freight lines on the Great Lakes, until at last all passed into railroad control. Beginning with 1900, when railroad control over the Lake lines became perfected, the first-class lake-and-rail rates from New York to Chicago were advanced by successive in-

creases from 54 cents to 62 cents, and the rates on the other classes were correspondingly advanced. In 1910, the trunk line interests agreed that the lake-and-rail rates should be actually advanced to the all-rail basis, and thus wipe out the differentials except on first class, which was to be advanced from 62 cents to 70 cents, instead of 75 cents. The measure was thwarted only by the refusal of a Canadian railroad, the Grand Trunk, to agree to this.

7. *Operating of boat lines by railroads stopped by Commission.*—On May 7, 1915, the Interstate Commerce Commission, exercising the power granted it under the Panama Canal Act, ordered the railroads to cease further operation of their Lake lines at the expiration of the 1915 season. This order was due largely to the increases which the railroads had made in the lake-and-rail rates. It was expected that more competition and lower rates in the lake-and-rail service would result. The railroad lines ordered to be sold were the Anchor Line, the Mutual Transit Company, the Lehigh Valley Transportation Company,[1] the Western Transit Company, the Rutland Transit Company, the Erie Railroad Lake Line. Some of these boats were sold to interests which took them to the Atlantic seaboard and used them in coastwise transportation or oversea transportation, in view of the

[1] The Lehigh Valley was enabled by the courts to retain its lake boats during the summer of 1916, but it was later compelled to sell them, the order of the Commission having been sustained. The Grand Trunk was allowed by the Commission to retain its Lake lines (Northern Navigation Co. and Canada Atlantic Transit Co.).

high water rates that could be earned in wartime ocean traffic. Most of the boats were purchased by the Great Lakes Transit Corporation, and were operated as a unit. They simply took over the old rate schedules of the railroads, and no change in the rate situation was brought about. The Government, after taking over the railroads, established a Lake line, the Lehigh Valley Transportation Company. Thru Lake-and-rail rates were established in connection with this line as well as the Great Lakes Transit Corporation. In general, these rates are now equal to the all-rail. (See Chapter VII.)

8. *Traffic on the Erie Canal.*—The Erie Canal, opened to traffic in 1825, was little used at the end of the nineteenth century. The railroads had become more efficient in transportation than the old canal, and, because of the system of port differentials, New York found that a larger and larger proportion of the export grain was moving via the differential ports, Philadelphia and Baltimore. Therefore, an improved Erie Canal, known as the Barge Canal, was voted by a referendum of the people of New York State. It was originally intended to cost $101,000,000. Supplementary appropriations, particularly those to provide for state-built barge canal terminals at New York, Buffalo, and a large number of intermediate towns, made the final cost about $150,000,000. The improvement was begun in 1903, and in 1918 was finished. The new canal takes barges carrying as much as 2,000 tons, whereas 240 tons were the

maximum that could be carried in barges that could pass thru the old Erie Canal locks.

In recent years, the canal has brought to New York a constantly diminishing proportion of the total flour and grain received at that port, while the west-bound tonnage, moving between New York and Buffalo, is almost negligible. The main traffic on the canal has been local traffic in building materials. The rate on grain, from Buffalo to New York, has averaged about 4 cents per bushel in recent years, but this 4 cents does not include the elevation charge at Buffalo of 0.5 cent per bushel for transferring grain between lake boats and the canal carriers.

9. *Contemplated use of the Barge Canal.*—When the Barge Canal was ready for operation in 1918 it was discovered that private interests had not provided floating equipment to operate upon it. The time was one when the country urgently needed the use of this canal to help unburden the heavily congested trunk line railroads of the country. Therefore the railroad administration used part of the $500,000,000 "revolving fund" given to it in the Railroad Control Act, to acquire and construct barges, tugs and power barges for use upon the canal.

The Railroad Administration at first announced rates on the canal identical with the all-rail rates. There was a violent protest on the part of shippers. In the first place, it was explained that no one would willingly ship by the slower break-bulk canal route to the West, if no lower rates were offered than applied

all-rail. In the second place, it was represented as an injustice that the Federal Government should take a canal for which New York had expended over $150,000,000 for the purpose of assuring to the Port of New York lower rates than all-rail rates—that the Federal Government should commandeer this canal and not give the shippers any of the advantages of the lower-cost transportation it afforded.

As a result of these representations, the Railroad Administration reversed its decision and announced canal rates to Buffalo 20 per cent lower than the all-rail. The differentials to the West, below the all-rail and the lake-and-rail, are given in Chapter VII. They amount to 10, 8, 6, 4, 4, 3 cents below the all-rail to Chicago and the West, and 5, 4, 3, 2, 2, 1½ cents to Cleveland and Detroit. A daily service now operates on the canal to the West from New York, with power barges carrying package freight and barge tows carrying bulk freight. Westbound business will probably be largely package freight. Returning, the leading items will be grain products, steel products and pig iron, for export and local consumption in New York.

It is to be expected that the main advantage of this service will accrue to points located along the lines of the barge canal. That is, it is unlikely that Eastern points away from the barge canal will get much advantage from it. For example, it is not likely that business between New England and the West will be transshipped at Troy between canal carriers and the

New England railroads. The thru rail-rates are so low that even if low canal rates were offered, the addition of a transshipment cost at Troy, and the comparatively high local rates from Troy to and from New England destinations, would make the thru canal-and-rail route higher than the all-rail.

10. *Traffic on the Mississippi.*—There is a widespread impression that the lack of transportation service on the Mississippi River is due to a lack of proper depth of the waterway, and that, to insure as extensive use of our rivers as, for example, Germany has, we must have large government expenditures on engineering work to deepen the channel. This impression is not founded on fact. The Rhine, for its navigable length from Rotterdam to Mannheim—a distance of 350 miles—has a depth of channel, at low water, of only six and one-half feet. The Mississippi has nine feet for 840 miles, from New Orleans to Cairo, and eight feet for over a thousand miles from New Orleans to St. Louis. The Mississippi system has 2,500 miles of six-foot channels. From 1885 to 1907, the traffic on the Rhine increased 400 per cent, and in the latter year amounted to 64.5 million tons. From 1889 to 1906, traffic on the Mississippi River system decreased 31 per cent. Yet during this period the United States government spent far more for the channel of the Mississippi than the German government did for the channel of the Rhine. Volume of traffic is not primarily a question of channel depth.

11. *Rhine and Mississippi rivers compared.*—The

great difference between the two systems is that on the Mississippi the traffic consists of business that moves from one point on the Mississippi River or the Ohio to another point on the Mississippi or Ohio; that is, it is a port-to-port business. On the Rhine, the river ports are not primarily points of origin and destination for the traffic that moves on the river; they are transshipment points, or funnels thru which is poured the export and import traffic of all western Germany. That is, railroads, upon which all points not on the waterway are dependent, feed the Rhine, and they do not feed the Mississippi.

Transportation on the Rhine has been modernized, and the river has taken its place as the greatest waterway in the world, while the Mississippi retained its ancient form of transportation and failed to meet the competition of the American railroads. On the Rhine —for example, at Duesseldorf and Mannheim—are river harbors, which in technical excellence of construction, in providing for cheap transfer between river barge and car or dray, rival the works at the German seaports. Cranes, elevators and facilities for storage exist exactly as at a seaport. On the river ply long, low, powerful sidewheel tugs, each having in its wake a train of barges with an average load of 1,500 tons each. River transportation is in the hands of large, responsible companies which have "season" rates, make deliveries on schedule, and, in conjunction with the ocean steamship companies, give thru bills of lading to all foreign lands. The steel con-

struction of barges and tugs, the excellent condition of the river, the regulation of river traffic and the nature of river terminal facilities, all work to keep insurance on German water transportation low. The Rhine is a traffic watershed for all western Germany.

A striking contrast exists between Rhine and Mississippi ports. The Mississippi has no harbor basins, with tracks on the water's edge on which stand freight cars whose cargoes wait for transshipment; no electric cranes or coal hoists; no modern freight sheds, warehouses and grain elevators. Tho manual labor is dearer in America than Germany, and hoisting machinery cheaper, cranes and other mechanical freight handlers are little used in our Mississippi ports. If the shipment is to go inland, it must be drayed up the hilly levee and thru the city streets to the freight receiving station of the railroad. The railroad unwillingly takes the shipment and charges a high rate on it for having come part way by water instead of by another railroad.

12. *Obsolete types of boats and port equipment.*— In the matter of steamboat types, the Mississippi craft have made little advance beyond the boat of Civil War days. Not only is there an amazing number of decrepit steamers on the river, but the new boats show no advance in type. They are still wooden, flat-bottomed stern-wheelers, their monumental smokestacks emitting dense clouds of black smoke to obscure the landscape and testify to the coal they waste. They are double-deckers; the continuous up-

per deck prevents the use of freight handling machinery to load and unload the cargo on the lower deck.

In the United States, private railroads cannot be expected to divert traffic to the water lines as is done in Germany, where the state makes good the loss in revenue to the railroads from rail-and-water traffic. If American railroads do not get their money from transportation, they do not get it at all. Court decisions in the United States have tended to allow the railroads to defend themselves against water competition; namely, to enforce low rates for transportation parallel to the river, and high rates for transportation which goes part way on the river.

ALL-RAIL CLASS RATES BETWEEN RIVER POINTS COMPARED WITH ALL-RAIL CLASS RATES FROM RIVER POINTS TO INTERIOR POINTS

		Rate per 100 pounds in cents					
	Distance Miles	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
1. From Louisville, Ky. to St. Louis, Mo., on Mississippi River	274	54	45.5	33.5	23	20	16
Knoxville, Tenn., in interior	286	95	81.5	71.5	59	50	41.5
Difference	41	36	38	36	30	25.5	
2. From Memphis, Tenn. to Natchez, Miss., on Mississippi River	297	69	56.5	50	37.5	31.5	27.5
Texarkana, Ark., in interior	290	146.5	126.5	100	94	75	65
Difference	77.5	70	50	56.5	43.5	37.5	

Railroad rates in the Mississippi Valley present many instances of the manner in which the railroads keep down their rates for hauls where there is present or potential water competition, and recoup themselves by higher rates elsewhere. The practice is strikingly illustrated by the tables of rates opposite.

In 1889, the water traffic on the Mississippi between St. Louis and New Orleans was 844,000 tons, while in 1908 it had fallen to 88,500 tons. This drop is mainly due to the free hand allowed to the rail carriers in competing with the boats. The railroads, granting low rates along the waterways, could reimburse themselves by higher rates elsewhere. Nor does the Interstate Commerce Commission, which is charged with regulating the carriers, seem inclined or empowered to stop this practice. In its decision on the "Southeastern cases" (30 I. C. C. 153), decided April 13, 1914, the Commission used the following language in justifying the maintenance of lower rates from Chicago, Cairo, Cincinnati, Louisville, and St. Louis to Vicksburg, Natchez, Baton Rouge, New Orleans, Mobile, Pensacola, and Tampa than to intermediate rail points:

> It is evident that the rates and facilities afforded by the rail lines have had the effect of eventually attracting to these lines nearly all of the long distance traffic between Ohio River points, upper Mississippi River points, and Missouri River points on the one hand, and New Orleans, on the other. There is no reason for believing that the rates to New Orleans when established by the rail lines in 1887 and since maintained, were not necessitated by an active compelling

water competition. Without doubt, the change in demands of commerce, the increased facilities of the railroads, their better organization and regularity of service, have been influential in winning for them not only a share of the traffic but nearly all of the traffic. The water competition, once actual and compelling, is still, however, potential, and it is most earnestly contended by the petitioners (the railroads) herein that any substantial increase in the rates to New Orleans will have the effect of reestablishing water competition, with the subsequent loss of traffic and revenue to the rail lines. *It is represented that having secured the traffic thru years of struggle, there is nothing in the Fourth Section of the Act to Regulate Commerce as amended in 1910, that puts upon the rail carriers an obligation to establish rates which will restore to the boat lines the traffic they have lost.*

The pride of the Mississippi River system has been the fleets of coal barges floated down the Ohio River from Pittsburgh. A huge stern-wheel steamer lashes to herself several acres of barges with 40,000 or 50,000 tons of coal aboard, waits for high water on the Ohio and sets off down stream like a floating island. Barges are taken off at various points, all the way to New Orleans. The barges are of flimsy wooden construction and are broken up and sold for kindling when they reach the seaboard.

When the United States Railroad Administration was empowered to construct and operate carriers on inland waterways, both the country's demand for transportation and political pressure from the Mississippi Valley section induced the establishment of water transportation on the Mississippi. A Federal Manager was appointed for the "Mississippi and

Black Warrior Ways" and he set out to construct barges and tugs with Federal moneys. Before these Government boats went into operation, there were on the Ohio and Mississippi only packet lines doing a local business. There were no thru lines, as from St. Paul to New Orleans, St. Louis to New Orleans or even Memphis to New Orleans. The rates on the local packet lines were uniformly kept at a slight differential below rail rates.

So long as the Government operates both rail and water carriers, cooperation between the two is assured. So long as Government lines remain on the Mississippi and Barge Canal, no private companies will dare compete. If the Government should later turn its river and canal carriers over to private operators, a new situation will arise. If the Government owns the railroads, it may be doubted whether it will cooperate extensively with the private water carriers, short-hauling the rail lines and forgoing needed revenue. Certainly if the rail lines return to private ownership, they will resume their established policy of antagonism to the water lines. Under our Federal laws, it may be doubted whether they can be compelled to short-haul themselves and cooperate. Whether the rail carriers are Government-owned or privately owned, the solution of the problem of water transportation may well lie in allowing both rail and water carriers to be owned by the same people, their joint rates, and all-water rates as well, under control of the Interstate Commerce Commission.

REVIEW

What is the present status of water transportation in the United States?

If you were a shipper in Duluth, by what route would you send grain to the seaboard for export? Why would you select this route?

What has been the relation between rail and water routes? What are the views of the Commission on this relation?

Do you see a promising future for the Barge Canal?

What methods would you employ to revive and stimulate traffic on the Mississippi River System?

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